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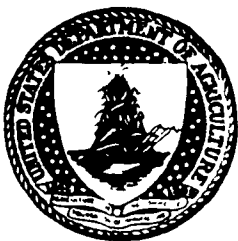
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RADAR REMOTE SENSING FOR CROP CLASSIFICATION AND CANOPY
CONDITION ASSESSMENT: GROUND DATA DOCUMENTATION

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16. Abstract <p>In 1982, an experiment was conducted in the vicinity of Lawrence, Kansas in support of the Free-Flying Imaging Radar Experiment (FIREX)/Shuttle Active Microwave Experiment (SAMEX) program. The experiment was designed to address specific questions pertaining to agricultural crop-identification and crop-condition assessment from data obtained from radar, and visible and infrared sensors.</p> <p>During the months from April to November of 1982, a vegetation and soil-moisture experiment was conducted in order to examine the microwave emission and backscattering from vegetation canopies and soils. This report describes the data-acquisition methodology used in conjunction with the Mobile Radar Scatterometer (MRS) systems, and documents associated ground-truth data. Test fields were located in the Kansas River floodplain north of Lawrence, Kansas. Ten fields each of wheat, corn, and soybeans were monitored over the greater part of their growing seasons. The tabulated data summarize measurements made by the sensor systems and represent target characteristics. Target parameters describing the vegetation and soil characteristics include plant moisture, density, height, and growth stage, as well as soil moisture and soil-bulk density.</p> <p>Complete listings of pertinent crop-canopy and soil measurements are given. These values correspond to the remotely sensed data documented in two companion volumes (RSL TR 580-1: Volumes I and II).</p>					
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RSL Technical Report 580-2

April 1983

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ABSTRACT

In 1982, an experiment was conducted in the vicinity of Lawrence, Kansas in support of the Free-Flying Imaging Radar Experiment (FIREX)/Shuttle Active Microwave Experiment (SAMEX) program. The experiment was designed to address specific questions pertaining to agricultural crop-identification and crop-condition assessment from data obtained from radar, and visible and infrared sensors.

During the months from April to November of 1982, a vegetation and soil-moisture experiment was conducted in order to examine the microwave emission and backscattering from vegetation canopies and soils. This report describes the data-acquisition methodology used in conjunction with the Mobile Radar Scatterometer (MRS) systems, and documents associated ground-truth data. Test fields were located in the Kansas River floodplain north of Lawrence, Kansas. Ten fields each of wheat, corn, and soybeans were monitored over the greater part of their growing seasons. The tabulated data summarize measurements made by the sensor systems and represent target characteristics. Target parameters describing the vegetation and soil characteristics include plant moisture, density, height, and growth stage, as well as soil moisture and soil-bulk density.

Complete listings of pertinent crop-canopy and soil measurements are given. These values correspond to the remotely sensed data documented in two companion volumes.

1.0 INTRODUCTION

The 1982 summer field-experiment program consisted of several experiments aimed at increasing our understanding of microwave emission and backscattering from vegetation canopies and soils. The objectives of the experiment-program were as follows:

1. To examine the crop discrimination capabilities of radar throughout the growing seasons of wheat, corn, and soybeans.

2. To examine the soil-moisture mapping capabilities of radar and microwave radiometers for vegetation-covered soils throughout the growing seasons of wheat, corn, and soybeans.

3. To examine the vegetation canopy as an emitter and scatterer of microwave energy as a function of canopy geometry and biomass.

4. To study, at different stages of crop growth, the effects of total-scene geometry in terms of soil surface roughness, row direction versus view angle, and canopy geometry.

5. To examine the data collected by visible/infrared remote sensing techniques, which will be used for comparison with microwave data.

To realize the above objectives, two different microwave systems were designed and used in monitoring the temporal behavior of the radar backscattering of crops. For crop-discrimination and soil-moisture experiments, ten fields each of wheat, corn, and soybeans were examined an average of

three times per week during their respective growing seasons (Table 1.) A crop calendar is presented in Figure 1.

In addition, several special experiments were conducted on selected fields to examine the vegetation and canopy geometry effects of each crop. These included row-direction experiments for bare and vegetated soil, defoliation experiments, and canopy attenuation and emission experiments.

2.0 EXPERIMENT TEST SITE

The 1982 summer experiment site is located on the Newman and Holiday Terraces of the Kansas River floodplain north of Lawrence, Kansas (Figure 2). This area is intensively cultivated and represents a typical agricultural scene of non-irrigated winter wheat and soybeans, and partially irrigated corn, although none of the test fields was irrigated during the summer experiment.

2.1 Field Selection

The criteria used to select the target fields were as follows:

1. Fields must be representative of the general population of fields at the test site.

2. Fields must have a relatively uniform surface in terms of soil type, slope, drainage, and planting characteristics in order to minimize within-field variability.

3. Fields for each crop should have a range of soil textures in order to maximize between-field variability.

TABLE 1
Duration of Measurements

Crop Type	Duration	Canopy Height (cm)
Wheat	April 10 - July 7	23 - 104
Corn	May 19 - October 15	13 - 311
Soybeans	June 9 - November 1	6 - 112

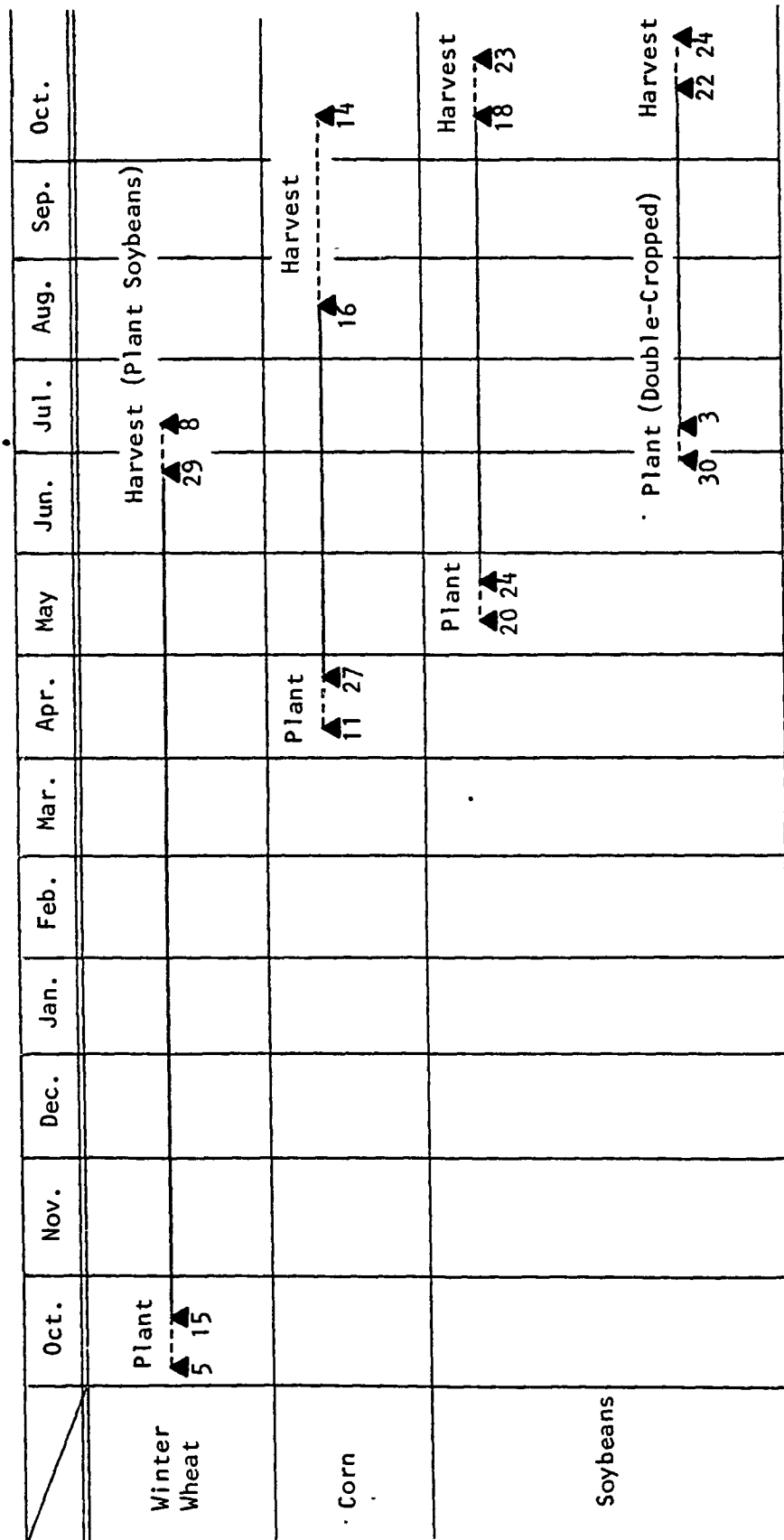


Figure 1. Crop calendar (October 1981 - October 1982).

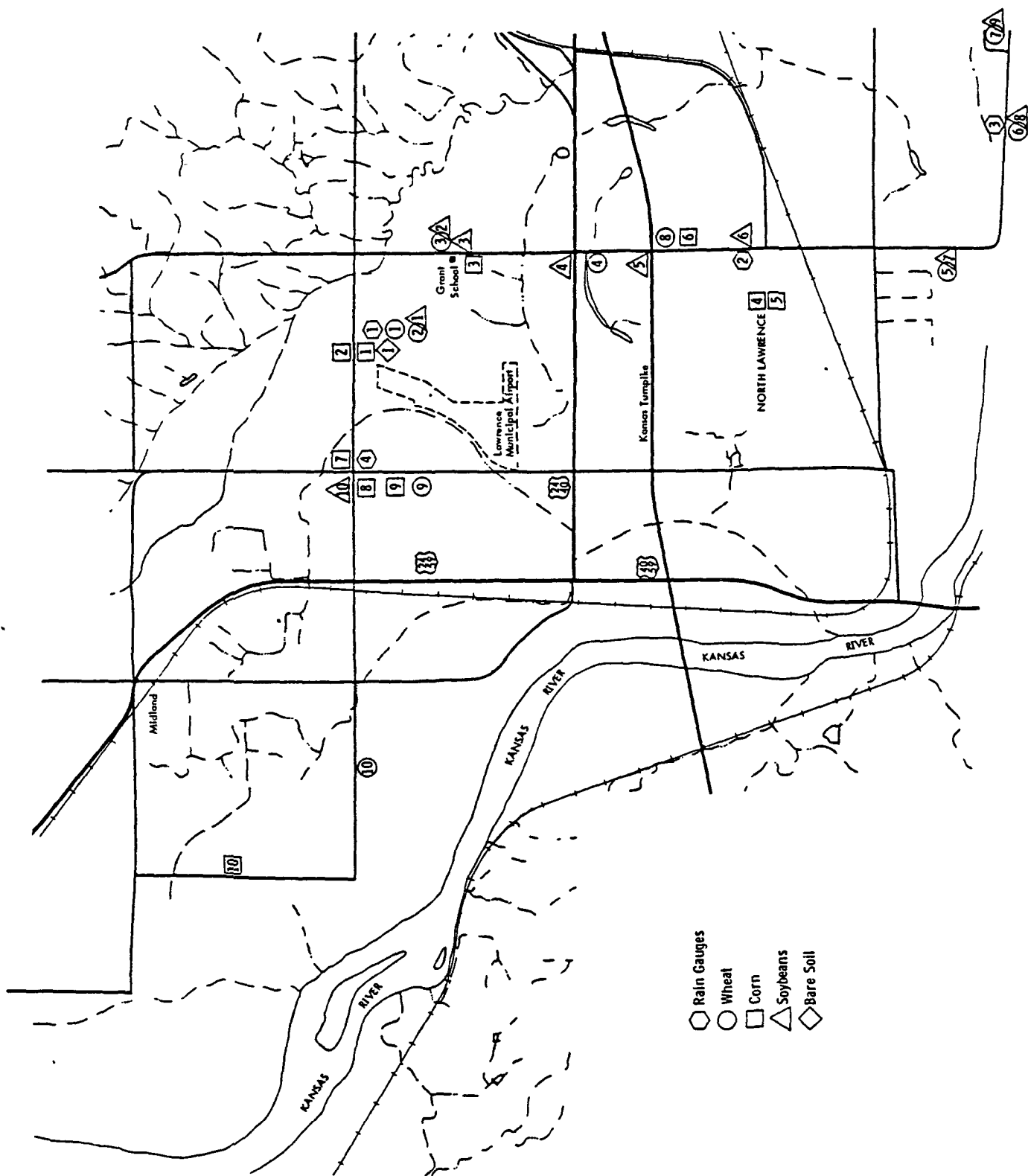


Figure 2. Test sites and field locations.

4. Fields must be readily accessible, and should be amenable to the data-collection activities of the truck-mounted sensor systems as well as of the ground-truth teams. Fields with a wide roadside ditch and/or roadside power lines should be avoided.

Using these criteria, ten fields of each crop were selected. Figure 2 shows their locations within the test site. It should be noted that Soybean Fields Nos. S1, S2, S7, S8, and S9 were double-cropped with wheat, and thus correspond to Wheat Fields Nos. W2, W3, W5, W6, and W7, respectively.

2.2 Field Preparation

The turn-rows within the fields were either 30 feet wide (about 9 m) or 60 feet wide (about 18 m). The turn-rows exhibit a crop row direction parallel to the adjacent access road. The illuminated ground swaths of both the radar and the Modular Multiband Radiometer (MMR) lie beyond the 30-foot-wide turn rows. Corn Fields Nos. C3, C4, C5, C6, C7, and C8, and Soybean Fields Nos. S3, S4, and S6 had 60-foot-wide turn-rows (about 18 m), so the swath fell within the turn-rows.

For data-sampling purposes, two red flags were positioned 100 feet (about 30 m) apart on the roadside to define the limits of each field. Six sampling grids were defined (Figure 3) for the collection of soil moisture samples, vegetation samples, and bulk-density samples. Ground-truth samples were taken without disturbing the radar

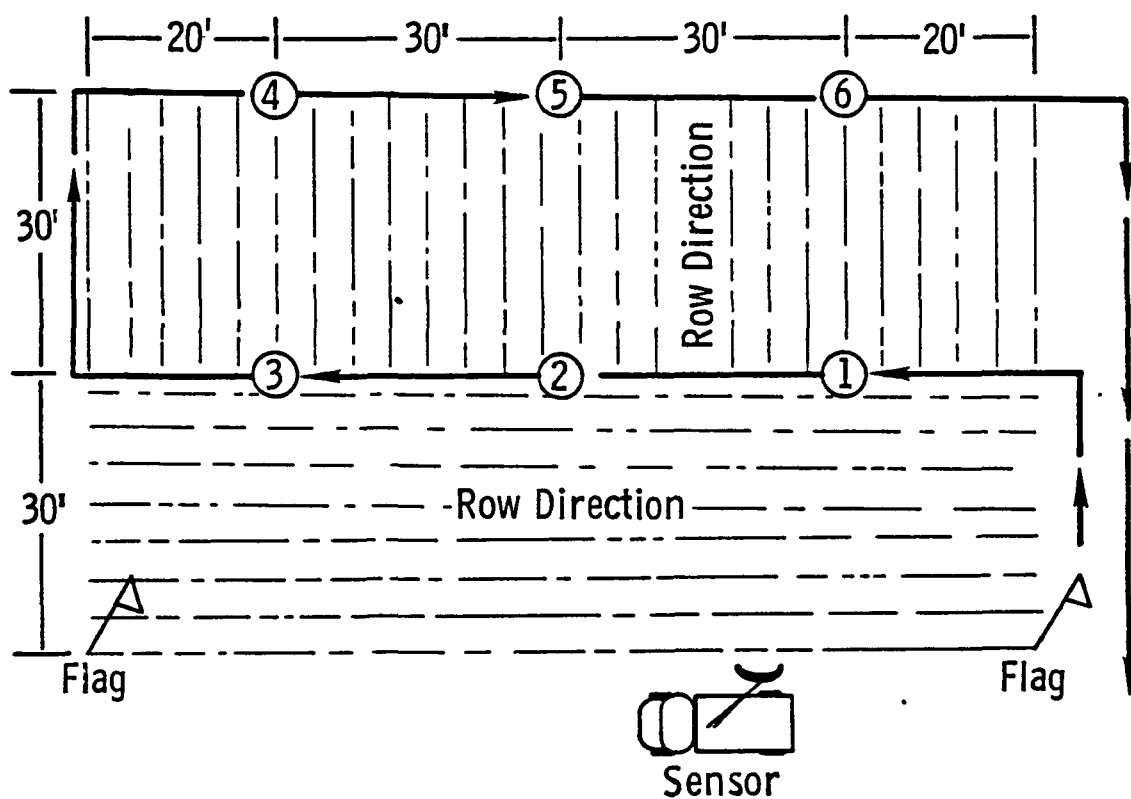


Figure 3. Field layout and sampling grid. Arrows indicate the route taken during ground-truth activities.

or MMR swaths.

2.3 Field Description

The following sections provide brief discussions, by crop_type, of the test fields over time. For detailed observations concerning each field, see Appendices III.f, III.g, and III.i.

2.3.1 Wheat Fields

Wheat fields W1 and W2 were located side-by-side on one agricultural field. Field W2 was designated to provide ground-truth support for the wheat screen experiment conducted immediately adjacent to W2.

All fields were planted with winter wheat in October 1981. The fields were fairly wet due to frequent rain and suffered moderate rainstorm damage early in the season. A severe thunderstorm on June 7, 1982 flattened many of the plants, and a considerable number of previously collected biomass samples were lost when the drying shed was blown away by the storm. By June 17, most of the crop stands had recovered from the storm damage; however, the radar swath portion of W5 did not recover.

The soil in Fields W3, W5, W6, W7, W8, and W10 was relatively well drained, whereas W9 was located in a low-lying area and remained partially flooded for many weeks early in the summer. Field W4 was located near a swampy area and standing water was observed from June until close to harvest time.

2.3.2 Corn Fields

The corn plants in ten test fields grew without incident. After the heading and flowering stages, most corn stands started to develop two or three cobs per plant. As moisture stress became a reality in the middle of the season, only the uppermost cob ripened and reached maturity in most cases.

Standing water was often observed in fields C1 and C2 early in the summer. Plant stands in C2 were not uniform, as piles of seeds were spilled during planting. Corn-screen and sliding-lens/horn experiments were conducted on C1. Field C4 was the healthiest and produced the tallest corn plants among the corn fields observed.

2.3.3 Soybean Fields

Soybean crops suffered moderate storm damage early in the season. Leaves were shredded and there were some soil-surface washouts. Field S4 was tilled and replanted.

Soybean fields S1, S2, S7, S8, and S9 were also wheat fields W2, W3, W5, W6, and W7, double-cropped. Soybeans were planted by the no-till method with minimum disturbance of the soil. Most of the double-cropped fields suffered from weed infestation, i.e., emerging wheat plants from seed spills initially, and taller broadleaf weeds later. There were more weeds than soybeans in S2, S7, and S9. Field S2 was the site of a weed defoliation experiment.

3.0 MEASUREMENT SCHEDULE AND DATA-ACQUISITION REQUIREMENTS

The measurement schedule shown in Table 2 formed the basis for obtaining an adequate number of samples for each experiment. Because of the possibility of weather problems and equipment failures, scheduling flexibility was maintained and implemented on a weekly basis. A measurement log was maintained by each ground-truth team and for each system in order to identify and tabulate the fields measured and problems encountered, and to record any other observations that might be helpful in the interpretation of the data.

The ground-truth measurements were designed to obtain sufficient information to describe target characteristics. The ground-truth data acquired during the experiment are listed in Table 3.

Daily weather measurements were obtained from the University of Kansas Weather Service, and included wind speed and direction, precipitation amounts, and temperature. Supplemental precipitation measurements were recorded on a daily basis from four rain gauges located in the vicinity of the test fields (see Figure 2). Weather data are reported in Appendix III.j.

4.0 EXPERIMENT DESCRIPTIONS

4.1 Crop Description/Soil Moisture Experiments

Crop discrimination and soil-moisture experiments were conducted simultaneously, using built-in combinations of different system parameters (Table 4). Three crops (wheat,

TABLE 2
Measurement Schedule

Week	Day	Activity
1	Monday	Crop ID/Soil Moisture
	Tuesday	Sliding Lens/Horn, Calibration
	Wednesday	Crop ID/Soil Moisture
	Thursday	Defoliation
	Friday	Crop ID/Soil Moisture
2	Monday	Crop ID/Soil Moisture
	Tuesday	Sliding Lens/Horn, Calibration
	Wednesday	Crop ID/Soil Moisture
	Thursday	Row Direction Experiment
	Friday	Crop ID/Soil Moisture

TABLE 3
Data-Acquisition Requirements

Characteristics	Frequency
1. Atmospheric:	
Wind speed (km/hr)	Daily
Wind direction	Daily
Precipitation (mm)	Daily
Air temperature (°C)	Daily
Relative humidity (%)	2 per day
2. Crop Canopy:	
Height (cm):	3 per week
Total canopy height	
Lowest green-leaf height (corn only)	
Highest green-leaf height (corn and wheat only)	
Top fruit height (corn only)	
Growth stage and photo	Weekly
Leaf-area index (LAI)	Weekly
Wet biomass (layered & by part)	3 per week
Dry biomass (layered & by part)	Weekly
Plant density & row characterization	As necessary
Farm-operator activities	As they occur
3. Soil:	
Soil moisture (0-2 and 2-5 cm)	With radar
Soil bulk density (0-2 and 2-5 cm)	At least 3 times
Soil texture	At least 3 times
Surface roughness	As necessary

TABLE 4
System Parameters

System	Band	Spectral Range (Frequency/Wavelength)	Polarization	Incidence Angle	Purpose
MARS-C/X	C	5.04 GHz	HH VV	50°	Crop ID
	C	5.04 GHz	HH HV	20°	Soil Moisture
	X	10.2 GHz	VV VH	50°	Crop ID
	X	10.2 GHz	VV VH	20°	Soil Moisture
MARS-L/S/C	L	1.6 GHz	HH VV	0-60°	Crop ID
	S	3.4 GHz	HH VV	0-60°	Crop ID
	C	5.04 GHz	HH VV	0-60°	Crop ID
MMR	1	0.45 - 0.52 μ m	-- --	0°	Soil vs. Crop
	2	0.52 - 0.60 μ m	-- --	0°	Crop Vigor
	3	0.63 - 0.69 μ m	-- --	0°	Crop ID
	4	0.76 - 0.90 μ m	-- --	0°	Biomass
	5	1.15 - 1.30 μ m	-- --	0°	
	6	1.55 - 1.75 μ m	-- --	0°	Plant Moisture
	7	2.08 - 2.35 μ m	-- --	0°	Hydrothermal
	8	10.4 - 12.5 μ m	-- --	0°	Crop Stress

corn, and soybeans) were examined, plus bare fields resulting from systematic defoliation. Each field was visited three times per week, on Monday, Wednesday, and Friday. Ground-truth data were taken within one hour of radar observation. In addition, selected fields were observed by the MMR, which is a Landsat-4 simulator. The MMR data were obtained on clear days only and within one hour of the Landsat overflight time, i.e., 09:30 local time or 10:30 Daylight Savings Time.

4.2 Special Experiments

Special experiments were conducted on one or two selected fields per crop in support of regular crop-discrimination and soil-moisture experiments.

4.2.1 Defoliation Experiments

Defoliation experiments were conducted on selected fields of wheat, corn, and soybeans in order to examine the vegetation canopy as an emitter and scatterer of microwave energy. The fields were observed by both the active and passive systems, from both row directions, at all available frequencies, and with both like- and cross-polarization. When using the passive system, both H- and V-polarizations were used to measure energy emission. The following target conditions were examined:

- Wheat:
1. soft dough stage
 2. prior to harvest

- Corn:
1. prior to cob development
 2. after cob development
 3. after canopy had dried

- Soybeans:
1. prior to podding
 2. after podding
 3. prior to harvest

Defoliation was accomplished using a combine for wheat, and by hand for corn and soybeans. Data were obtained for a range of incidence angles from 10° to 70° and from both row directions.

Each experiment was divided into several steps for each crop, depending on the growth status and the nature of the canopy being examined:

- Wheat:
1. with canopy
 2. with canopy removed (bare soil)

- Corn:
1. with full canopy
 2. with leaves removed
 3. with cobs removed
 4. with stalks removed (bare soil)

- Soybeans:
1. with canopy
 2. with canopy removed (bare soil)

At each step of the defoliation process, data from both systems were obtained as well as ground-truth data.

Soil-moisture samples for the 0- to 2-cm and 2- to 5-cm depths were collected from 12 sampling locations in a 60' x 60' (18 m x 18 m) defoliation plot, as shown in Figure 4. At six of these locations, row separation, plant density, and biomass samples were also obtained. Ground truth was collected while the systems were being repositioned in order to view the test plot from a different azimuth angle.

4.2.2 Canopy Emission and Attenuation

Aluminum window screens were used in order to effectively block emission from the underlying soil; hence, the brightness temperature measured by the microwave radiometer is related solely to the emission from the canopy. The screened area was 30' x 30' (9 m x 9 m) in size. Each week the radiometer observed the screen-covered areas and an adjacent area (without screens) from both row directions. The screens were placed so as to cover the soil surface, while still allowing unhindered crop growth. For wheat, two layers of one-inch (1 inch = 2.54 cm) chicken wire were placed in early November 1981, while plants were emerging. To block the emission further, strips of six-inch-wide aluminum window screens were added between the rows in early May 1982, resulting in a gap of about one to three inches for crop stands. For corn and soybean plots, only aluminum screens were used. The width of the screens was 29 inches and the resulting gap between the screens was about two inches. Approximately 95 percent of the plots were covered with screens.

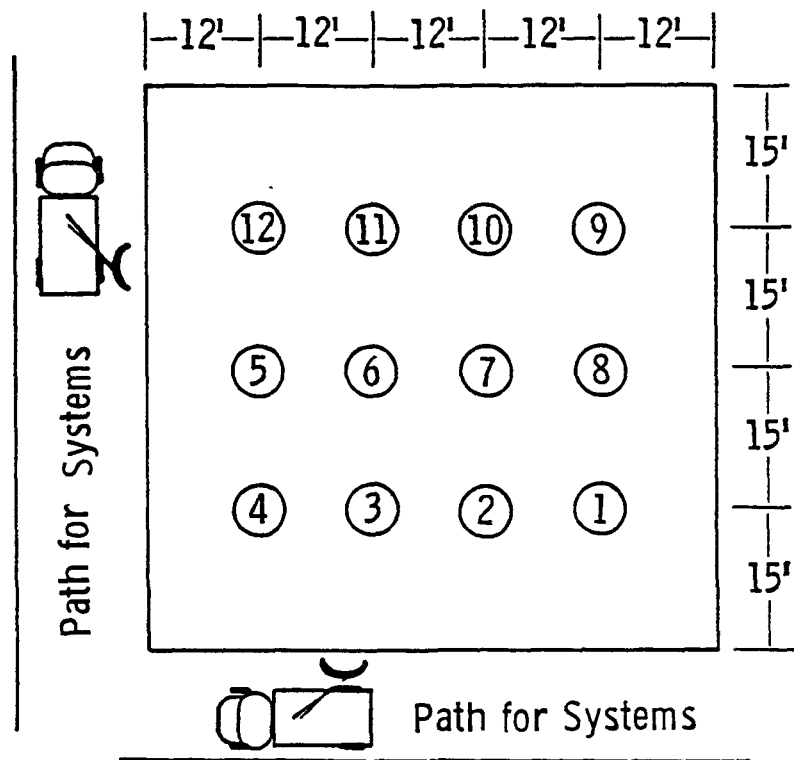


Figure 4. Defoliation plot.
 Soil moisture sampling locations: 1 to 12.
 Vegetation moisture sampling locations: 1 to 3
 and 9 to 11.

Once a week, the canopy attenuation effect of each crop was measured by the scatterometers at each frequency. This was accomplished by measuring the backscattering from a sliding Luneberg lens as it was pulled along a trough (Figure 5). The lens was tied to the truck in order to allow it to slide at the same speed as the antennas. The radar system observed the lens through several rows of plants at a fixed angle of incidence. This procedure was repeated at the same range without pulling the lens, so that data comparisons could be made. In addition, a small receiving antenna was substituted for the Luneberg lens in order to measure one-way canopy attenuation.

4.2.3 Row-Direction Experiments

The effects of crop row direction on emission and backscattering, both of which are caused by variations in the soil-surface geometry and by differential masking of the soil, were examined three times each for corn and soybeans, as well as for bare surfaces resulting from defoliation. Each row-direction experiment included observation of the crop or the bare soil from multiple azimuthal view angles (α). The purpose of this type of data acquisition was to investigate the azimuthal dependence of radar backscattering (σ°) and brightness temperature (T_B) on the bare and vegetation-covered soils.

The experiments were scheduled with respect to crop growth stage and defoliation. The measurements often required a full day, and ground truth was usually taken two

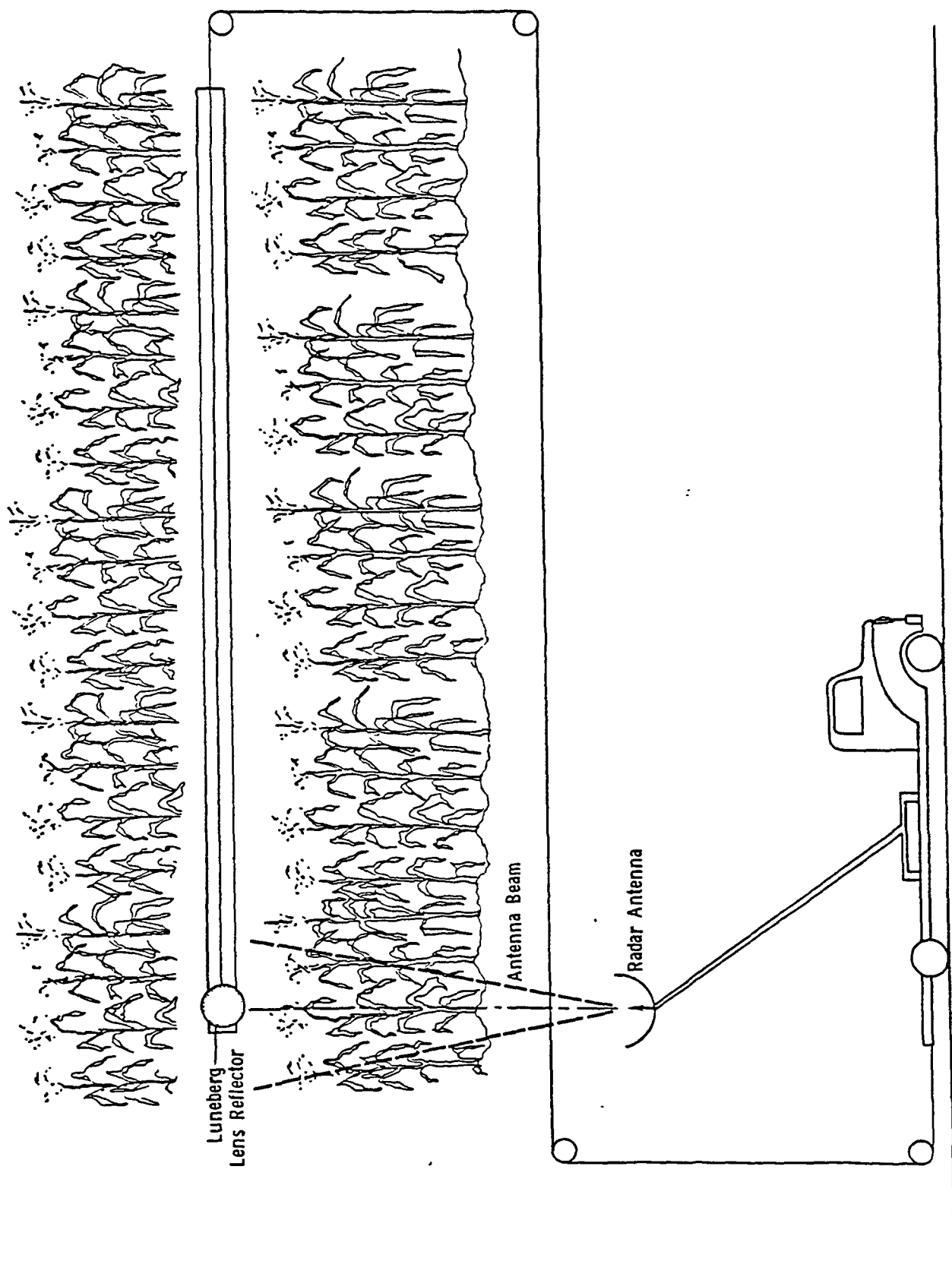


Figure 5. Measurement configuration of a sliding Luneberg lens.

times during an experiment.

Row-direction experiments were conducted for a range of incidence angles and for azimuth angles of 0° , 45° , 70° , and 90° . An azimuth view angle of 0° corresponds to an antenna beam direction (look) parallel to the crop-row direction, while an azimuth view angle of 90° corresponds to an antenna beam direction orthogonal to the crop-row direction (Figure 6).

In addition to regular ground-truth acquisition, soil-moisture samples were taken from six locations for depths of 0-2, 2-5, 5-9, and 9-15 cm.

5.0 MRS/MMR DATA MEASUREMENTS

Two truck-mounted systems were used in the experiment. The MRS C/X-band scatterometer operated at 10.2 GHz (X-band) and 5.04 GHz (C-band), while the MRS-L/S/C system operated at 1.6 GHz (L-band), 3.4 GHz (S-band), and 5.4 GHz (C-band).

The MRS-C/X is a self-contained, automated system with which data can be acquired in either of two modes: the stationary-sweep mode or the mobile mode. It has a dual-polarized feed and operates simultaneously in both like- and cross-polarizations. The large 3-foot disc antenna was used for C-band, and the smaller (1-foot) antenna was used for the X-band like-polarized channel. The standard-gain horn was the receiving element for the X-band cross-polarized channel.

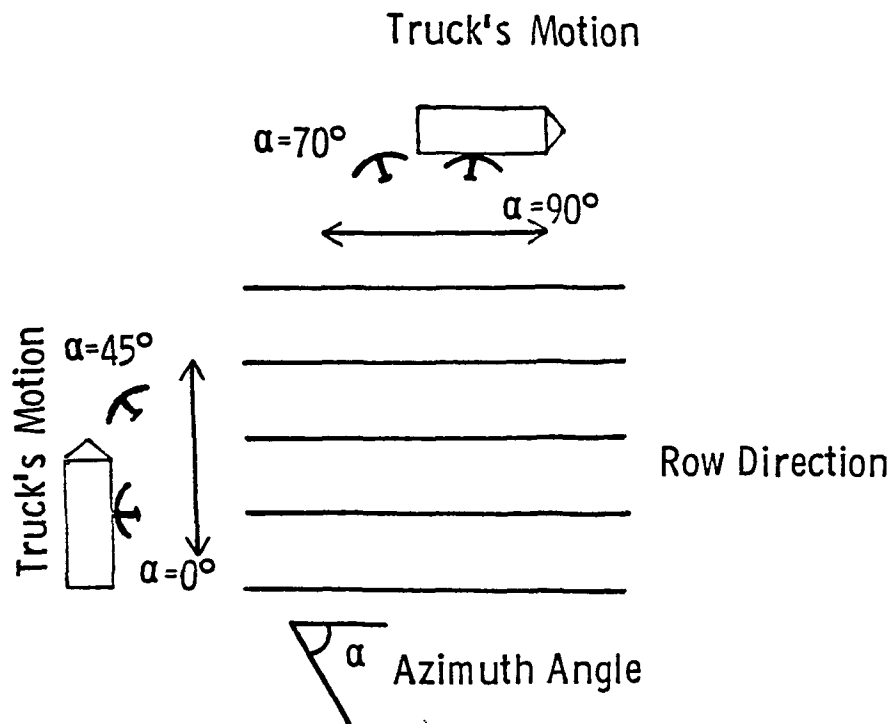


Figure 6. Definition of azimuth angle.

Internal calibration via a delay line and external calibration with a Luneberg lens were used to calibrate the instrument in terms of backscattering coefficients (σ^0). Available radar data are summarized in Appendix II.a. For system specifications, see Table 5. Details on the system, data measurements, and processed data are reported by Aslam (1983b).

The MRS-L/S/C is a mobile FM-CW radar system mounted on two trucks. The RF section consists of L-band, S-band, and C-band subsections that share a common transmit-polarization switch, delay line, and antenna feed. The system employs two methods of calibration. Short-term system variations are handled by replacing the antenna with a coaxial delay line of constant loss. Absolute calibration is accomplished by referencing the power returned from a target to the power returned from a Luneberg lens of known cross-section. Calibration with the Luneberg lens was usually performed once a week and calibration against the delay line was performed every 15 minutes. Data were acquired while making azimuth sweeps with the truck's boom. The elevation angle of the antenna and the sweep limits for the boom were set by the operator. The computer then set the frequency and polarization for the system, and began the azimuth sweeps. Table 6 shows system specifications. Details on the system, measurement procedures, and processed data are reported in Mikinski (1983).

Selected fields were measured by the Modular Multiband

TABLE 5
MRS-C/X SYSTEM SPECIFICATIONS

	<u>C-Band</u>	<u>X-Band</u>
Center Frequency:	5.04 GHz	10.2 GHz
Modulation Bandwidth Δf :	270 MHz	420 MHz
IF Frequency:	22 kHz	22 kHz
Polarization:	HH, HV VH, VV	VV and VH
Transmitted Power:	10 dBm	17 dBm
Modulation Rate (FM Rate):	50-900 Hz	20-660 Hz
Modulation:	Triangular	Triangular
IF Bandwidth		
Wide Filter	6600 Hz	6600 Hz
Narrow Filter	100 Hz	100 Hz
Antennas:	Parabolic Dish for HH, HV, VH, VV	Parabolic Dish for VV Standard-Gain Horn for VH
Diameter:	36" (91.5 cm)	12" (30.5 cm)
Feed:	Dual-Pol. Quad-ridged Horn - 4-18 GHz	Double Dipole
Product Beamwidth:		
Elevation	HH 3.28°	VV 4.14°
Azimuth	HH 3.75°	VH 5.86°
Elevation	VV 3.59°	
Azimuth	VV 3.30°	
Dynamic Range	70 dB	70 dB
Look Angle in Mobile		
Mode:	10° - 80°	10° - 80°
Height Above Ground:	10 m	10 m
Calibration		
Internal:	Delay Line (16 m)	Delay Line (10 m)
External:	Luneberg Lens	Luneberg Lens

TABLE 6
MRS-L/S/C SYSTEM SPECIFICATIONS

Center Frequencies:	1.6, 3.4, 5.4 GHz
Modulation Bandwidth Δf :	250 MHz
IF Frequency:	22 kHz
Polarization:	VV, HH, VH, HV
Transmitted Power:	12 dBm
Modulation:	Triangular
Modulation Rate:	150 - 550 Hz
IF Bandwidth:	3.3 kHz
Antenna:	Parabolic Dish
Diameter:	48" (122 cm)
Feed:	Dual Polarized Log Periodic 1 - 12 GHz

Product Beamwidth:

1.6	Elevation	HH	6.36°
1.6	Azimuth	HH	6.71°
1.6	Elevation	VV	7.24°
1.6	Azimuth	VV	6.18°
3.4	Elevation	HH	2.95°
3.4	Azimuth	HH	2.95°
3.4	Elevation	VV	3.10°
3.4	Azimuth	VV	3.10°
5.4	Elevation	HH	1.94°
5.4	Azimuth	HH	2.05°
5.4	Elevation	VV	2.26°
5.4	Azimuth	VV	1.87°

Dynamic Range:	70 dB
Angle of Incidence Range:	0 - 70 degrees
Height Above Ground:	10 - 20 meters
Calibration	
Internal:	Delay Line (16 m)
External:	Luneberg Lens

Radiometer (MMR), which was designed as a Landsat-4 Thematic Mapper (TM) simulator suitable for operation from a helicopter, small plane, truck, or from tripod platforms. The unit is equipped with the seven TM spectral bands, and an additional band in the 1.15- to 1.30- μ m range (Table 4). The radiometer was operated from a truck boom. The MMR data were calibrated and reported by Aslam (1983b). The summary of available MMR measurements is shown in Appendix II.b.

6.0 GROUND-TRUTH MEASUREMENTS

6.1 Vegetation Data

6.1.1 Height

For each field, the canopy height of each crop was measured three times per week. At each of six sampling locations within a field, a representative plant at a given location was randomly selected for sampling height and plant biomass. The following heights were measured with a meter-stick and recorded in centimeters.

- Wheat:
1. total canopy height
 2. height to top green leaf

- Corn:
1. total canopy height
 2. height to the top of the uppermost green leaf
 3. height to the top of the highest cob
 4. height to the lowermost green leaf

- Soybeans: total canopy height

Each height was measured from the plant's juncture with the soil. Figure 7 shows the position of each measurement.

6.1.2 Plant Density

Plant density is measured in terms of the number of individual plants per unit area. Data were taken infrequently, depending upon stage of crop growth, tillage practices, diseases, and pest- or storm-losses. In addition, the densities of the corn cobs and soybean pods were measured at their respective ripe stages, usually just prior to harvest.

For wheat, the number of stems and grain heads was counted, and the length of the grain heads was measured along two adjacent rows 15 cm long at each of six locations. The average row-separation distance was measured in centimeters from the base of one row to the base of the row adjacent to it. The plant-density data for wheat are summarized in Appendix III.a.2.

For corn-crop density, both the number of plants and the total number of cobs were recorded along 5 meters of row at each of six sampling locations. Average row separation at each location was also measured. The corn-density data are summarized in Appendix III.b.2.

For soybean crop density, the number of plants was counted along one meter of row. The row separation was also recorded. To determine the number of beans, two plant samples were taken from each of six locations.

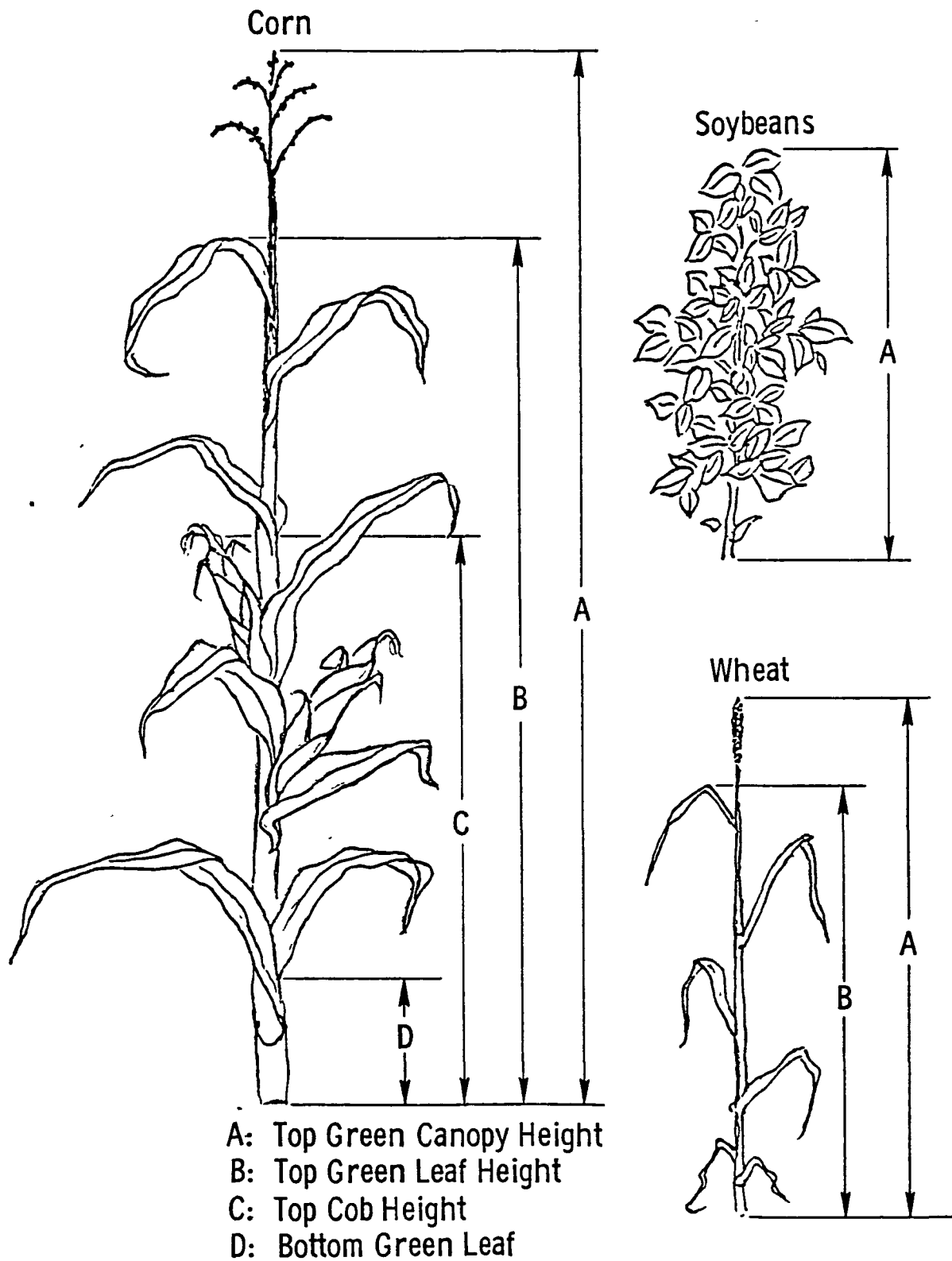


Figure 7. Canopy height measurements.

The number of mature beans per plant was calculated as a proportion of the weight of 100 beans to the weight of all the beans from 12 plant samples and divided by 12. The soybean-density data are summarized in Appendix III.c.2.

6.1.3 Biomass Data

After height determination, plants were cut at the soil juncture using the following method:

Wheat: all plants whose stems were within 15 cm of row from each of six locations.

Corn: one plant from each of six locations.

Soybeans: same as wheat.

To prevent loss of moisture, the vegetation samples were placed in plastic bags and tied securely as soon as they were taken. On each bag, the date and the field number were written in indelible ink. A data card containing information about height and other field-observation information was included in each bag. The samples were then transported to the field laboratory as soon as possible for processing (vegetation samples were not taken until plants were over 15 cm in height).

In the field lab, vegetation samples were processed in the following manner:

A mean canopy height was calculated from the six locations sampled. For wheat, the average head length was deducted from the mean, and the upper ends of the plant samples were lined up. The plant samples were then

subdivided into plant parts from the three layers of the canopy. The thickness of each canopy layer was one-third of the mean canopy height as measured downward from the tops of the plant samples. Thus, the upper and middle layers are of equal thickness, while the bottom layer may be thicker or thinner since the canopy height of the individual plants varies about the mean (see Figure 8). Vegetation samples were subdivided into:

- Wheat:
1. grain heads (after heading)
 2. upper layer (leaves and stems)
 3. middle layer (leaves and stems)
 4. bottom layer (leaves and stems)

- Corn:
1. upper-layer leaves
 2. upper-layer stems
 3. middle-layer leaves
 4. middle-layer stems
 5. upper cob
 6. lower cob
 7. lower-layer leaves
 8. lower-layer stems

- Soybeans:
1. upper layer (leaves, stems, and pods)
 2. middle layer " " "
 3. lower layer " " "

The gross weight (including bag weight) of all vegetative material in a given layer for each plant part was

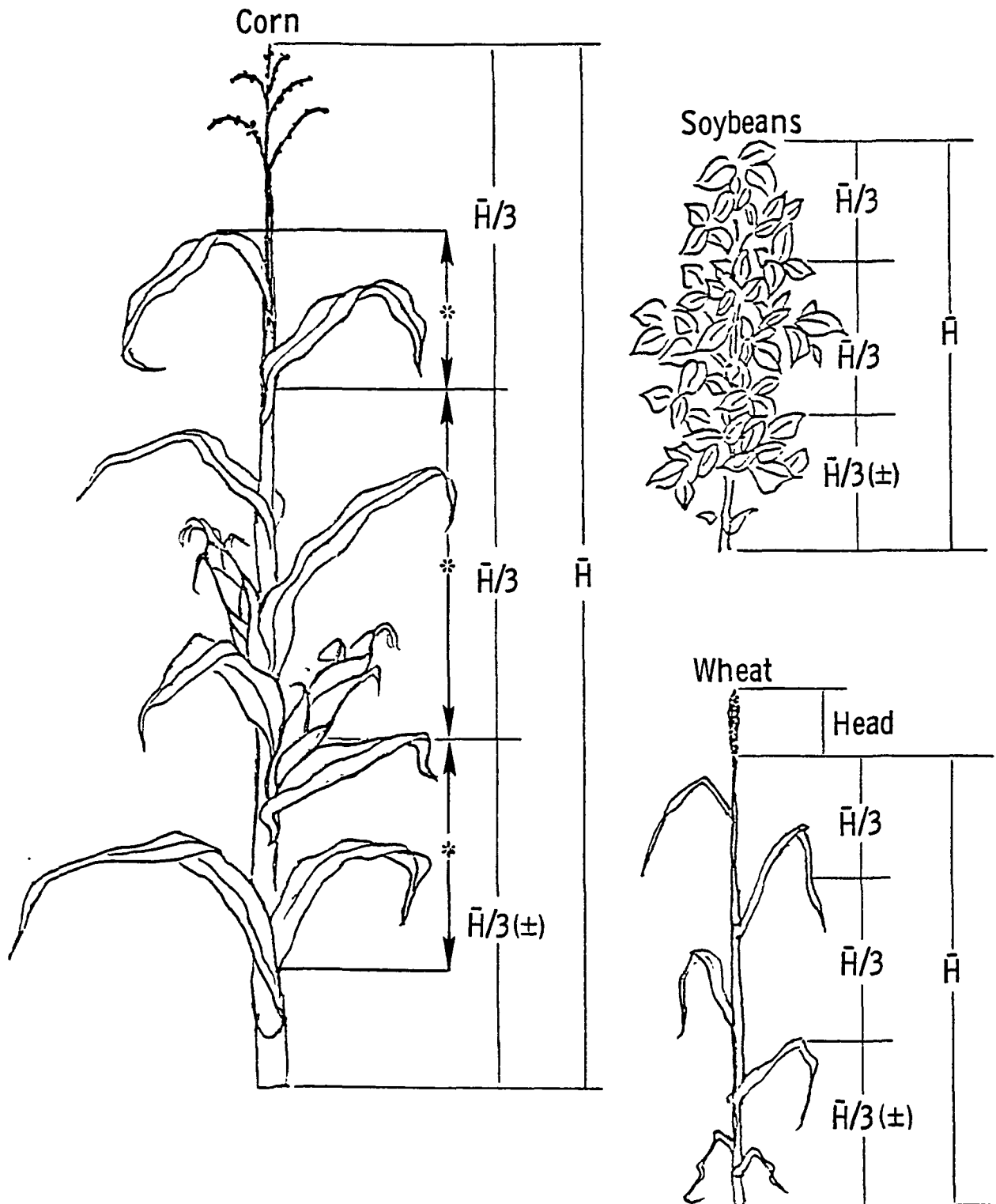


Figure 8. Plant subdivisions for biomass sampling.

- Note: 1. Divisions of wheat and soybeans are treated as planes passing through canopy.
 2. Divisions of corn are relative to stalk only (not planary).

*Denotes the leaf layer thickness pertinent to density calculations.

recorded separately on a field-data sheet. Sample size, i.e., the number of plants contained in the length of row sampled, was also recorded if it was different from that given above.

Once each week the vegetation samples from each field were bagged and dried at an approximate temperature of 65°C in a closed drying van, until weight change was less than one-tenth of a gram. A gas heater and a dehumidifier were operated in the van to maintain the temperature and to expedite the drying process.

The following formulas were used to determine the vegetation characteristics of each plant part:

$$\% \text{ Plant Moisture} = \frac{\text{wet weight (g)} - \text{dry weight (g)}}{\text{wet weight (g)}} \times 100 (\%)$$

$$\text{Wet Biomass Density} = \frac{\text{wet weight (g)}/1000}{\text{RL} \cdot \text{SL} \cdot \text{RS} \cdot \text{HT}} \quad (\text{kg/m}^3)$$

$$\text{Dry Biomass Density} = \frac{\text{dry weight (g)}/1000}{\text{RL} \cdot \text{SL} \cdot \text{RS} \cdot \text{HT}} \quad (\text{kg/m}^3)$$

$$\text{Plant Water Density} = \frac{\text{wet weight (g)} - \text{dry weight (g)}}{\text{RL} \cdot \text{SL} \cdot \text{RS} \cdot \text{HT} \cdot 1000} \quad (\text{kg/m}^3)$$

where:

Wet Weight = wet biomass weight from six locations (g),

dry Weight = dry biomass weight from six locations (g),

RL = row length sampled (m),

SL = number of sample locations (6),
RS = row separation (m),
HT = height of plant or plant part (cm).

Calculated vegetation data values are reported in Appendices III.2.1, III.b.1, and III.b.1. (See page 87 for further details on the calculation of corn vegetation data).

6.1.4 Growth-Stage Observations (and Farm Operations)

The crop-growth stage of each field was monitored once a week using the Large Area Crop Inventory Experiment (LACIE) scheme given in Appendix III.e. Additionally, each field was rated for crop damage and weed condition using the code and scaling system also given in Appendix III.e.

Two color slides of each field were obtained on a weekly basis showing field number, date, and general field condition. One was a general view of the field and the other was a close-up of the field, taken to show crop and soil conditions in more detail. The growth-stage observations are listed in Appendix III.f.

For each field, information on the following agricultural operations was maintained as obtained from farm operators. These include pre-planting tillage operations, planting date, seed variety, herbicide and pesticide application, fertilizer application and rate, cultivation date, harvest date, and yield. This information is reported in Appendix III.h.

6.1.5 Leaf-Area Index

A limited investigation into the relationship between

the leaf area and biomass of corn and soybean crops was also undertaken at the time. Two fields of corn (C1 and C3) and one field of soybeans (S3) were visited at least once per week throughout the growth cycle. Sampling consisted of five locations per field, one plant per location. Green and chloritic leaf areas were measured using a portable leaf-area meter, LI-COR 2000.

Area measurements of the corn plants could not be taken in situ because of the shredding of the leaves by the wind. Measurements were not possible for soybeans either, due to the trifoliate structure of the bean leaf. For these reasons, the leaves of a given plant were removed at their bases and placed in a clear plastic sheath. This allowed shredded leaves to be passed through the meter without an overlay and thus without subsequent data falsification. This also allowed dry, cracked leaves to be run through without their falling apart inside the meter. The plastic sheath itself only added 0.5 cm^2 to the measurement, while it greatly increased repeatability.

After leaf-area determination, wet- and dry-biomass weights were obtained for each of three parts of each plant: leaves, stalks, and fruit. Soil moisture was also determined at each location, for 0- to 5-cm depths.

An evaluation of a proposed alternative sampling routine was incorporated into the leaf-area index experiment. This involved comparison of plant percent moistures from whole plants as well as plant subsamples. A subsample of that

plant part taken from several locations on the plant, totalling approximately 25 grams. For example, a stalk subsample might include a small section taken from the top, middle, and bottom regions of the stalk.

6.2 Soil Data

Soil data include bulk-density profiles, soil texture, surface roughness, and soil moisture.

6.2.1 Soil Moisture

Soil moisture samples were obtained for the 0- to 2-cm and the 2- to 5-cm depths at the six sampling locations shown in Figure 3. They were obtained within one hour before or after a radar measurement. An adequate sample consisted of at least 100 grams of dry material.

Tillage practices resulted in a distinct ridge-and-furrow pattern. Since soil moisture distribution varies from trough to crest, it was necessary to acquire two sets of soil samples: one from the peak and the other from the trough. Samples were taken from the peaks of the ridge crests at locations 2, 4, and 6 on even-numbered days and from the ridge crests of locations 1, 3, and 5 on odd-numbered days. If furrows were not distinctive, soil moisture samples were taken from between the rows.

Samples were obtained from a randomly selected spot at a given location. Soil samples of the 0- to 2-cm and 2- to 5-cm layers were each placed in a paper cup (the soil samples were to fill at least half the cup). Plastic lids were then firmly affixed, and the samples were transported as

soon as possible to the support van or to the field laboratory for processing. The wet samples were weighed and then dried in a microwave oven until dry weight change was less than one-tenth of a gram. The drying time varied according to the amount of moisture in the soil samples, and the number of samples in the oven.

The gravimetric soil moisture (M_g) was computed for each depth as a percentage of the dry weight of soil as follows:

$$M_g = \frac{\text{wet weight (g)} - \text{dry weight (g)}}{\text{dry weight (g)}} \times 100.$$

All sample values, means, standard deviations, and coefficients of variation are reported in Appendices III.a.3, III.b.3, and III.c.3.

6.2.2 Soil Bulk Density

A straight-sided steel corer with a diameter of 4.7 cm was used to extract soil samples of a known volume. The corer had lines engraved at 1-cm intervals on its exterior surface.

The soil-bulk-density profile was measured three times for each field of corn and soybeans, and twice for each wheat field. Bulk-density soil samples were taken at six locations per field, and at two depths per location: 0-2 cm and 2-5 cm. Both ridge- and furrow-measurements were obtained at each visit to provide a representative sample of the field's

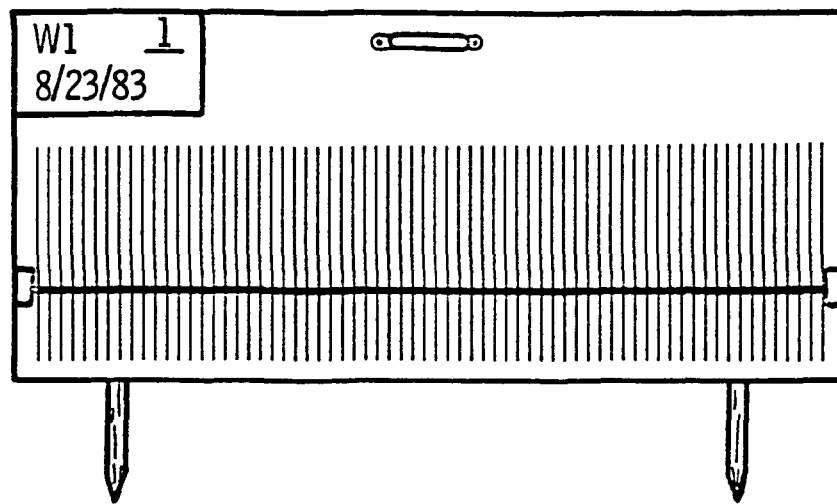
surface variations.

Soils containing high percentages of clay or organic matter made it more difficult to obtain accurate volumes. For all soil types, bulk density values for samples taken from the top 0-2 cm were less accurate than those taken from the 2- to 5-cm depth. This was due to the rough surface of the soil, especially after tilling. The soil-bulk density measurements are reported in Appendix III.d.1. The statistics for the correlation between gravimetric moisture and bulk density (0-5 cm) are reported in Appendix III.b.2.

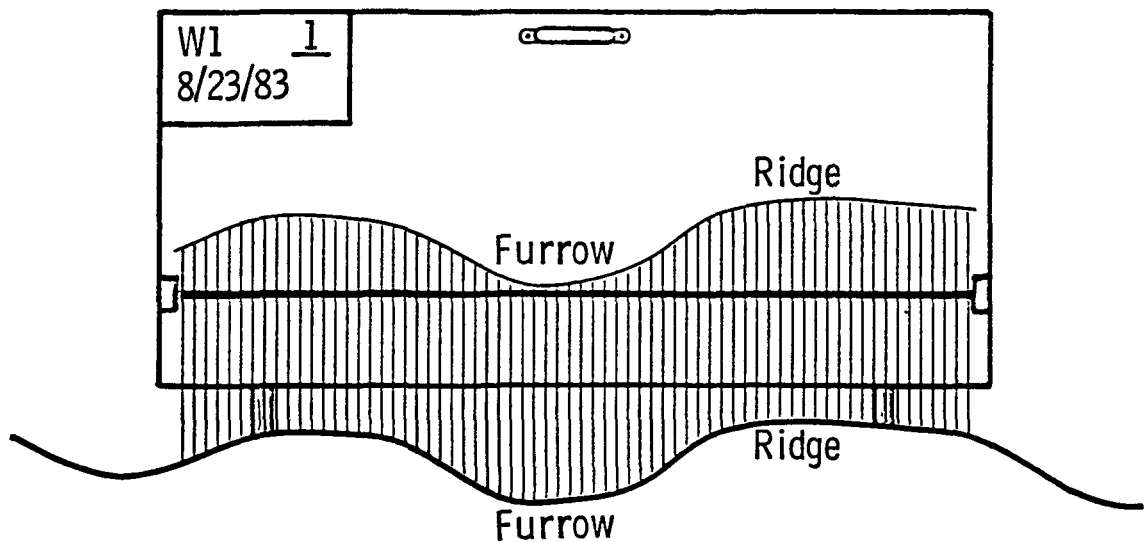
6.2.3 Surface Roughness

The soil surface roughness was measured with a "Ruffiometer," which was composed of a panel 123.5 cm in length with approximately 400 closely spaced pins mounted along the front of the panel (see Fig. 9). A frame with legs was used to hold the panel above the ground. This allowed a surface measurement to be taken with a minimum of disturbance to the surface microstructure. The panel was then made level by means of a leveling bubble, and the pins were released. The pins, painted black, were used to transfer the soil profile from ground level to a point midway up the white panel.

Once the panel was in place and level, it was photographed using large-format film and then moved in order to produce one contiguous profile. Two profiles were taken for a given field: (1) a profile perpendicular to the row direction (8 panels in length), and (2) a profile parallel to



- a. The pins are mounted along the front of the panel. The field number, orientation, and date are written in the upper lefthand corner of the panel.



- b. The pins are released and the soil roughness profile is transferred to the panel.

Figure 9. Soil surface roughness measurement with "Ruffiometer."

the rows (4 panels in length). The film was then processed and the negative was loaded onto a Video Digitizer (VDI) for quantification. After each image was digitized, the resulting lines were matched up to produce a continuous profile of the soil surface.

6.2.4 Soil Texture

Soil samples for texture analysis were collected from six locations per field as shown in Figure 3. Texture determinations were made by the hydrometric method at the RSL Soils Laboratory. The results are reported in Appendix III.g.

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APPENDIX I

MEASUREMENT LOG

- Notes:
1. C, X-20, 50 indicates that radar measurements were made at C- and X-bands at angles of incidence of 20° and 50°.
 2. MMR measurements are marked with asterisks (*).
 3. The numbers represent the test fields observed.
 4. Julian dates appear in parentheses.
 5. Abbreviations:
 - SM - Soil Moisture
 - VEG - Vegetation
 - BD - Soil Bulk Density
 - DEF - Defoliation Experiment
 - ROW - Row-Direction Experiment

Date (Julian)	Wheat Radar SM 1-10	VEG	Corn Radar SM	VEG	Soybeans Radar	SM	VEG	Notes
04/10(100)								X-50
04/11(101)								
04/12(102)	1-10							
04/13(103)								
04/14(104)								
04/15(105)								
04/16(106)	1-10							
04/17(107)								
04/18(108)								
04/19(109)	1-3	1-4						X-50
04/20(110)								
04/21(111)								
04/22(112)								
04/23(113)								
04/24(114)								
04/25(115)								
04/26(116)	1-10	1-10						X-50 BD:W1-W10
04/27(117)								
04/28(118)								
04/29(119)								
04/30(120)	1-10	1-10	1-10					X-50

Date (Julian)	Wheat Radar SM	VEG	Corn Radar SM	VEG	Soybeans Radar	SM	VEG	Notes
05/01(121)	1-10							X-50
05/02(122)								
05/03(123)	1-10	1-10						X-50
05/04(124)								
05/05(125)								
05/06(126)								
05/07(127)	1-8	1-9						X-50
05/08(128)								
05/09(129)								
05/10(130)	1-10	1-10						X-50
05/11(131)								
05/12(132)								
05/13(133)								
05/14(134)	1-10	1-10						X-50
05/15(135)								
05/16(136)								
05/17(137)	3-11	1-7						X-50
05/18(138)								
05/19(139)	1-4, 8-11	1-3, 9	1-3, 6-10	1-3, 7-10				X-50 started 6 locs
05/20(140)								
05/21(141)	3-8	1-9	1-6	1-8				X-50

Date (Julian)	Wheat		Corn		Soybeans		Notes
	Radar	SM	VEG	Radar	SM	VEG	
05/22(142)							
05/23(143)							
05/24(144)	1-4, 8	4-5, 8	4-5, 8	1-3, 6	6		x-50
05/25(145)							
05/26(146)	3-10	1-3, 9-10	1-3, 9-10	1-10	1-3, 8-10	1-3, 7-10	x-50
05/27(147)							
05/28(148)		4, 6-8	4,8		4-6		
05/29(149)							
05/30(150)							
05/31(151)							
06/01(152)	3-10	1-3, 5-10	1-3, 5-10	1, 3-10	3-10	5-10	x-50
06/02(153)	1-10	3,5-5, 8-9	3,5-6,1-10 8-9	1-10	1, 3-9	1, 3-9	x-50
06/03(154)							00:c1-c10
06/04(155)	3-10	1-4, 8-10		1-10	1-3, 7-10	1-3, 7-10	x-50
06/05(156)							
06/06(157)							
06/07(158)	3-10	3, 5-10	3, 5-10	3-10	3-10	3-10	x-50
06/08(159)							
06/09(160)	3-8,10	3,5-8, 10	3,5-8,3,6 10	3,6,10	3,6,10	3,6,10	x-50
06/10(161)							
06/11(162)							

Date (Julian)	Wheat		Corn		Soybeans		Notes
	Radar	SM	VEG	Radar	SM	VEG	
06/12(163)							
06/13(164)							
06/14(165)	3,8	1-3, 8-10	1-3, 8-10	1-3, 6-9	1-3,6, 9-10	3,5-6, 10	X-50
06/15(166)							
06/16(167)	1-10	1-3, 5-10	1-3, 5-10	1-10	3-6, 10	3,5-6, 10,21	X-50
06/17(168)							BD:C6
06/18(169)	3-10	5-8, 10	3,5-8,3,5-7, 10	3-6, 9,10	3-6, 10	3,5-6, 21	X-50
06/19(170)							
06/20(171)							
06/21(172)	1-10	1-3, 5-10	1-3, 5-10	1-9	1-10	3-6, 10,21	X-50
06/22(173)	2,3			1,4*		3*	BD:S3-S6, S10
06/23(174)	3-4,8	3	3	3,6	3	3-6,10	X-50
06/24(175)	2,3*			1,4*		2	
06/25(176)	1-10	1-3, 5-10	1-3, 5-10	1-10	1-10	3-6, 10,21	X-50
06/26(177)							
06/27(178)							
06/28(179)	1-10	1-3, 5-10	1-3, 5-10	1-10	1-10	3,5-6, 21	X-50
06/29(180)							BD:W1-W10
06/30(181)							
07/01(182)							
07/02(183)	2,7*	9-10	9-10	1*	9-10	4,6*	

Date(Julian)	Wheat		Corn		Soybeans		Notes
	Radar	SM	VEG	Radar	SM	VEG	
07/23(184)			6				
07/24(185)							
07/25(186)							
07/26(187)		1-6, 8	1-5, 7	1-6	3-6, 9,21	3-6, 21	
07/27(188)	1*	1-4, 8-10	1-3-4,1*,6*, 8-10	1-3, 6-10	3-5, 10,21	3-5, 10	
07/28(189)	1*		1*		4*,6*		
07/29(190)	4-8	5,9-10 9-10	5,7, 9	4-6 9-10	4-5, 7-10	6,10, 21	x-50
07/30(191)							
07/31(192)							
07/12(193)	3,5-7 1*,3*	1,5,8, 10	4-5,7 1-6	1-7, 9-10	2-6 8,21	3-6,8, 10,21	x-50
07/13(194)	3**	1,5, 8-10	7	1**,7-8 2-3	3*, 1-2, 4-10	3,4,6,10, 10,21	**C,X-30 C,X-50 corn def
07/14(195)							
07/15(196)		1,9		1-10	3-6	1,6, 10 5	
07/16(197)							
07/17(198)							
07/18(199)							
07/19(200)				1-6	1-5,7-9	3-6	B0:C1-C6 S1,S4-S6 C,X-50
07/20(201)			1-7,9 10,1*	7-10 7-10(B0)	2-6 2*,3*	2,7,10	B0:S2,S7,S10 corn row
07/21(202)			1-3, 6-9				
07/22(203)					21	6,21	soybean def
07/23(204)			1*,21*	1-10	1*,3*	1-6, 10	

Date(Julian)	Wheat		Corn		VEG	Soybeans		Notes
	Radar	SM	Radar	SM		Radar	SM	
07/24(205)								
07/25(206)								
07/26(207)	1-3,6-9 1*,b1*	1-10			1-10	1-3,5-10,b1 b1,1*,3*	1-10	C,X-20,50 BD:53,58-59,52
07/27(208)								
07/28(209)	4,6-9 b1	1-8			1-9	4-10	1-10	C,X-20,50
07/29(210)								soybean row
07/30(211)	1-3,6-9 b1*,1*	1-3, 6-8			1-3, 6-9	1-7,10 1*,3*	1-2, 4-7,10	C,X-20,50
07/31(212)								
08/01(213)								
08/02(214)	1-3 b1	1-3, 7-9			1-5, 7-9	1-3	1-4, 9-10 10,21	C,X-20,50
08/03(215)	5-9 1*,b1*	7-9				6,10 2*,3*		C,X-20,50
08/04(216)	4-6,9 1*,b1*	4-9			5-9	6-9,b2 1*,3*	5-10	C,X-20,50
08/05(217)								
08/06(218)	1-3	3			1-6	2,3		
08/07(219)								
08/08(220)								
08/09(221)	1-9 b1	2-9			1-9	1-10 b2	1-9	1-10
08/10(222)								
08/11(223)				1	1			
08/12(224)								
08/13(225)								

Date (Julian)	Wheat		Corn		Soybeans		Notes
	Radar	SM	Radar	SM	Radar	SM	
08/16(228)			1-9	1-6	1-10 b2 1*,3	1-9, 21	VEG 1-10,21 21 corn def
08/17(229)			1*				
08/18(230)			2-3,7-9 b1*,1*	1-3 7-9	1-4, 10,1*	1-4	1-3 4,6 soybean row
08/19(231)							
08/20(232)			b1*	1	1*		6
08/21(233)						21	21
09/02(245)			1,3, 7-9	1-3,7,9	1-4, 10	1-4, 10	BD:C1-C3, S1-S4
09/09(252)			1-3, 6-7	1-3, 6-7	1-10	1-9	C,X-20,60
09/10(253)						21	
09/11(254)							
09/12(255)							
09/13(256)			1*		1*,3*	21	21
09/14(257)							
09/15(258)							
09/16(259)			1-4 1*	1-3, 6-7	1-10 1*,3*	1-10 21	C,X-20,60 alfalfa
09/17(260)							
09/18(261)							
09/19(262)							
09/20(263)							
09/21(264)			1*		1*,3*		corn def
09/22(265)			1*		1*,3*		corn def

Date (Julian)	Wheat		Corn		Soybeans		Notes
	Radar	VEG	Radar	VEG	Radar	VEG	
09/23(266)			2	2	1-4, 10	1-4,10,21 10,21	C,X-20,60 BD:S1-S2
09/24(267)			1*		1*,3*		
09/25(268)							
09/26(269)							
09/27(270)					1*,3*		
09/28(271)				2	1-10 1*,3*	1-10,21 21	C,X-20,60 BD:S7-S9
09/29(272)							
09/30(273)			2	2	1-10	1-10,21 5821(BD)	C,X-20,50 soybean row
10/01(274)							
10/02(275)							
10/03(276)							
10/04(277)							
10/05(278)			2	2	1-5, 7-9	1-9	C,X-20,50 soybean def
10/06(279)							
10/07(280)					1-2,7-9, 1*,3*	1-2,7-9 1-2,7-9	C,X-20,50 alfalfa

APPENDIX II

SENSOR DATA SUMMARY

- a. Radar Data Summary
- b. MMR Data Summary

Appendix II.a

Radar Data Summary

FD	April	May	June	July	August	September	October
W1	10 19 26 30	1 3 7 10 14	2 16 21 25 28	12 13			
W2	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
W3	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
W4	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
W5	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
W6	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
W7	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
W8	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
W9	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
W10	10 19 26 30	1 3 7 10 14	2 16 21 25 28	9 12			
C1	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C2	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C3	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C4	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C5	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C6	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C7	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C8	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C9	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
C10	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12
S1	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S2	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S3	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S4	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S5	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S6	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S7	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S8	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S9	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21
S10	19 21 24 26	1 2 4 7 9 14 16 18 21	25 28	12 13 20 26 30	6 9 16 18	9 16 23 30	5 12 14 19 21

Note: 1. The numbers represent the dates measurements were taken.
 2. Abbreviations: FD - Field Designation
 W - Wheat field
 C - Corn field
 S - Soybean field

Appendix II.b
MMR Data Summary

FD June	July	August	September	October
B1	23 26 30	3 4 18 20		
C1 22 24	2 7 8 20 23 26 30	3 4 17 18	13 16 21 22 24	
C4 22 24				
C6	7			
GR		18		
S1	23 26 30	4 18 20	13 16 21 22 24 27 28	7 11 12 14
S2		3		
S3 22 24	12 20 23 26 30	3 4 17	13 16 21 22 24 27 28	7 11 12
S4	2 8			
S6	2 7 8			
WA	26			
W1	7 8 12			
W2 22 24	2			
W3 22 24	12 20			
W7	2			

Note: 1. The numbers represent the dates measurements were taken.

2. Abbreviations: FD - Field Designation
B - Bare Soil
C - Corn Field
GR - Grass
S - Soybean Field
WA - Water
W - Wheat Field

APPENDIX III.a

GROUND-TRUTH DATA - WHEAT

1. Wheat Vegetation Data
2. Plant Density Data
3. Soil Moisture Data

Appendix III.a.1

Wheat Vegetation Data

Wheat Field # 1 DATE: 4/30/82 (Julian:120)						
Time:12:49	Mean Canopy Height:	40.7 cm	Top Leaf Height:	40.7 cm		
Plant Parts:	Head	Top1/3 Mid1/3 Low1/3	All Layers	Whole Plant		
% Plant Moisture:	0.	82.02	79.76	77.01	80.02	80.02
Wet Biomass Density:	0.	6.66	5.48	3.96	5.36	5.36
Dry Biomass Density:	0.	1.20	1.11	0.91	1.07	1.07
Plant Water Density:	0.	5.46	4.37	3.05	4.29	4.29
Wheat Field # 1 DATE: 5/ 3/82 (Julian:123)						
Time:13:15	Mean Canopy Height:	40.7 cm	Top Leaf Height:	40.7 cm		
Plant Parts:	Head	Top1/3 Mid1/3 Low1/3	All Layers	Whole Plant		
% Plant Moisture:	0.	82.79	84.80	83.60	83.75	83.75
Wet Biomass Density:	0.	7.06	7.63	7.87	7.52	7.52
Dry Biomass Density:	0.	1.22	1.16	1.29	1.22	1.22
Plant Water Density:	0.	5.85	6.47	6.58	6.30	6.30
Wheat Field # 1 DATE: 5/ 7/82 (Julian:127)						
Time:14:05	Mean Canopy Height:	44.0 cm	Top Leaf Height:	44.0 cm		
Plant Parts:	Head	Top1/3 Mid1/3 Low1/3	All Layers	Whole Plant		
% Plant Moisture:	0.	89.34	83.04	83.38	84.91	84.91
Wet Biomass Density:	0.	7.88	10.85	9.48	9.40	9.40
Dry Biomass Density:	0.	0.84	1.84	1.57	1.42	1.42
Plant Water Density:	0.	7.04	9.01	7.90	7.98	7.98
Wheat Field # 1 DATE: 5/14/82 (Julian:134)						
Time:13:50	Mean Canopy Height:	68.7 cm	Top Leaf Height:	68.7 cm		
Plant Parts:	Head	Top1/3 Mid1/3 Low1/3	All Layers	Whole Plant		
% Plant Moisture:	0.	83.13	82.77	91.34	85.15	85.15
Wet Biomass Density:	0.	8.13	8.80	6.05	7.66	7.66
Dry Biomass Density:	0.	1.37	1.52	0.52	1.14	1.14
Plant Water Density:	0.	6.76	7.29	5.52	6.52	6.52
Wheat Field # 1 DATE: 5/17/82 (Julian:137)						
Time:15:28	Mean Canopy Height:	70.7 cm	Top Leaf Height:	70.7 cm		
Plant Parts:	Head	Top1/3 Mid1/3 Low1/3	All Layers	Whole Plant		
% Plant Moisture:	0.	78.16	79.30	85.68	81.96	81.96
Wet Biomass Density:	0.	3.98	4.79	7.48	5.41	5.41
Dry Biomass Density:	0.	0.87	0.99	1.07	0.98	0.98
Plant Water Density:	0.	3.11	3.80	6.41	4.44	4.44
Wheat Field # 1 DATE: 5/19/82 (Julian:139)						
Time:10:26	Mean Canopy Height:	76.2 cm	Top Leaf Height:	67.0 cm		
Plant Parts:	Head	Top1/3 Mid1/3 Low1/3	All Layers	Whole Plant		
% Plant Moisture:	0.	7.43	12.06	13.63	11.04	11.04
Wet Biomass Density:	0.					
Dry Biomass Density:	0.					
Plant Water Density:	0.					

III.a.1-1

III.a.1-2

Wheat Field # 1 DATE: 5/21/82 (Julian:141)									
Time:15:07		Mean Canopy Height:		85.0 cm		Top Leaf Height:		78.0 cm	
Plant Parts:		Head		Top1/3 Mid1/3 Low1/3		All Layers		Whole Plant	
% Plant Moisture:		0.		5.28		16.07		21.25 14.20 14.20	
Wet Biomass Density:									
Dry Biomass Density:									
Plant Water Density:									
Wheat Field # 1 DATE: 5/24/82 (Julian:144)									
Time:12:05		Mean Canopy Height:		91.5 cm		Top Leaf Height:		75.7 cm	
Plant Parts:		Head		Top1/3 Mid1/3 Low1/3		All Layers		Whole Plant	
% Plant Moisture:									
Wet Biomass Density:									
Dry Biomass Density:									
Plant Water Density:									
Wheat Field # 1 DATE: 5/26/82 (Julian:146)									
Time:13:07		Mean Canopy Height:		94.7 cm		Top Leaf Height:		76.0 cm	
Plant Parts:		Head		Top1/3 Mid1/3 Low1/3		All Layers		Whole Plant	
% Plant Moisture:		12.39		3.54		7.34		8.03 6.30 6.89	
Wet Biomass Density:									
Dry Biomass Density:									
Plant Water Density:									
Wheat Field # 1 DATE: 6/ 1/82 (Julian:152)									
Time:15:07		Mean Canopy Height:		109.0 cm		Top Leaf Height:		78.0 cm	
Plant Parts:		Head		Top1/3 Mid1/3 Low1/3		All Layers		Whole Plant	
% Plant Moisture:		14.80		3.20		7.29		6.71 5.73 6.50	
Wet Biomass Density:									
Dry Biomass Density:									
Plant Water Density:									
Wheat Field # 1 DATE: 6/ 2/82 (Julian:153)									
Time:09:41		Mean Canopy Height:		88.5 cm		Top Leaf Height:		63.8 cm	
Plant Parts:		Head		Top1/3 Mid1/3 Low1/3		All Layers		Whole Plant	
% Plant Moisture:									
Wet Biomass Density:									
Dry Biomass Density:									
Plant Water Density:									
Wheat Field # 1 DATE: 6/ 4/82 (Julian:155)									
Time:14:25		Mean Canopy Height:		101.5 cm		Top Leaf Height:		72.7 cm	
Plant Parts:		Head		Top1/3 Mid1/3 Low1/3		All Layers		Whole Plant	
% Plant Moisture:		16.69		3.03		7.73		8.12 6.29 7.24	
Wet Biomass Density:									
Dry Biomass Density:									
Plant Water Density:									

Wheat Field # 1 DATE: 6/14/82 (Julian:165)
 Time:14.40 Mean Canopy Height: 101.3 cm Top Leaf Height: 73.0 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 55.14 64.63 70.18 69.00 68.79 65.43
 Wet Biomass Density: 9.88 1.32 3.28 4.46 3.02 3.64
 Dry Biomass Density: 4.43 0.47 0.98 1.38 0.94 1.26
 Plant Water Density: 5.45 0.85 2.30 3.08 2.08 2.38

Wheat Field # 1 DATE: 6/16/82 (Julian:167)
 Time:09.14 Mean Canopy Height: 99.0 cm Top Leaf Height: 75.5 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 14.13 2.56 5.01 6.12 4.57 5.46
 Wet Biomass Density: 14.13 2.56 5.01 6.12 4.57 5.46
 Dry Biomass Density: 14.13 2.56 5.01 6.12 4.57 5.46
 Plant Water Density: 14.13 2.56 5.01 6.12 4.57 5.46

Wheat Field # 1 DATE: 6/21/82 (Julian:172)
 Time:09.38 Mean Canopy Height: 97.2 cm Top Leaf Height: 74.0 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 37.44 58.66 65.31 65.70 64.38 58.06
 Wet Biomass Density: 12.28 1.94 7.29 3.32 4.18 4.95
 Dry Biomass Density: 7.68 0.80 2.53 1.14 1.49 2.08
 Plant Water Density: 4.60 1.14 4.76 2.18 2.69 2.87

Wheat Field # 1 DATE: 6/25/82 (Julian:176)
 Time:11.10 Mean Canopy Height: 95.2 cm Top Leaf Height: 74.3 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 8.08 1.67 2.92 3.94 2.84 3.35
 Wet Biomass Density: 8.08 1.67 2.92 3.94 2.84 3.35
 Dry Biomass Density: 8.08 1.67 2.92 3.94 2.84 3.35
 Plant Water Density: 8.08 1.67 2.92 3.94 2.84 3.35

Wheat Field # 1 DATE: 6/28/82 (Julian:179)
 Time:13.50 Mean Canopy Height: 84.0 cm Top Leaf Height: 65.2 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 19.08 41.21 58.10 60.59 57.43 48.42
 Wet Biomass Density: 9.03 1.21 4.38 5.26 3.62 4.21
 Dry Biomass Density: 7.31 0.71 1.84 2.07 1.54 2.17
 Plant Water Density: 1.72 0.50 2.55 3.19 2.08 2.04

Wheat Field # 1 DATE: 7/ 6/82 (Julian:187)
 Time:10.37 Mean Canopy Height: 41.8 cm Top Leaf Height: cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 10.04 10.04 10.04 10.04 10.04 10.04
 Wet Biomass Density: 10.04 10.04 10.04 10.04 10.04 10.04
 Dry Biomass Density: 10.04 10.04 10.04 10.04 10.04 10.04
 Plant Water Density: 10.04 10.04 10.04 10.04 10.04 10.04

III.a.1-3

Wheat Field # 1 DATE: 7/ 7/82 (Julian:188)
 Time:13.43 Mean Canopy Height: 23.8 cm Top Leaf Height: cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 12.42 12.42 12.42 12.42 12.42 12.42
 Wet Biomass Density: 12.42 12.42 12.42 12.42 12.42 12.42
 Dry Biomass Density: 12.42 12.42 12.42 12.42 12.42 12.42
 Plant Water Density: 12.42 12.42 12.42 12.42 12.42 12.42

Wheat Field # 2 DATE: 4/30/82 (Julian:120)
 Time:12.55 Mean Canopy Height: 36.3 cm Top Leaf Height: 36.3 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 77.67 80.18 80.27 79.45 79.45 79.45
 Wet Biomass Density: 0. 6.43 5.94 8.56 6.98 6.98
 Dry Biomass Density: 0. 1.44 1.18 1.69 1.43 1.43
 Plant Water Density: 0. 4.99 4.76 6.87 5.54 5.54

Wheat Field # 2 DATE: 5/ 3/82 (Julian:123)
 Time:13.20 Mean Canopy Height: 43.7 cm Top Leaf Height: 43.7 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 83.99 84.96 86.45 85.06 85.06 85.06
 Wet Biomass Density: 0. 7.66 8.71 6.61 7.66 7.66
 Dry Biomass Density: 0. 1.23 1.31 0.90 1.14 1.14
 Plant Water Density: 0. 6.43 7.40 5.71 6.52 6.52

Wheat Field # 2 DATE: 5/ 7/82 (Julian:127)
 Time:14.00 Mean Canopy Height: 48.0 cm Top Leaf Height: 48.0 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 81.09 81.09 81.09 81.09 81.09 81.09
 Wet Biomass Density: 0. 5.12 2.71 11.60 6.47 6.47
 Dry Biomass Density: 0. 0.97 0.97 0.97 0.97 0.97
 Plant Water Density: 0. 4.15 4.15 4.15 4.15 4.15

Wheat Field # 2 DATE: 5/14/82 (Julian:134)
 Time:13.56 Mean Canopy Height: 63.3 cm Top Leaf Height: 63.3 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 75.17 82.59 83.56 81.02 81.02 81.02
 Wet Biomass Density: 0. 4.15 5.90 5.91 5.32 5.32
 Dry Biomass Density: 0. 1.03 1.03 0.97 1.01 1.01
 Plant Water Density: 0. 3.12 4.87 4.94 4.31 4.31

Wheat Field # 2 DATE: 5/17/82 (Julian:137)
 Time:15.08 Mean Canopy Height: 65.0 cm Top Leaf Height: 65.0 cm
 Plant Parts: Head Top1/3 Midl/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 86.00 85.06 78.59 82.90 82.90 82.90
 Wet Biomass Density: 0. 5.18 5.61 6.53 5.77 5.77
 Dry Biomass Density: 0. 0.72 0.84 1.40 0.99 0.99
 Plant Water Density: 0. 4.45 4.77 5.14 4.79 4.79

III.a.1-4

Wheat Field # 2 DATE: 5/19/82 (Julian:139)
Time:10:50 Mean Canopy Height: 72.3 cm Top Leaf Height: 61.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 1.77 7.04 11.97 6.93 6.93
Wet Biomass Density: 0. 1.77 7.04 11.97 6.93 6.93
Dry Biomass Density:
Plant Water Density:

Wheat Field # 2 DATE: 5/21/82 (Julian:141)
Time:15:10 Mean Canopy Height: 85.5 cm Top Leaf Height: 67.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 6.17 8.45 8.81 7.81 7.81
Wet Biomass Density: 0. 6.17 8.45 8.81 7.81 7.81
Dry Biomass Density:
Plant Water Density:

Wheat Field # 2 DATE: 5/24/82 (Julian:144)
Time:12:00 Mean Canopy Height: 100.2 cm Top Leaf Height: 80.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 2 DATE: 5/26/82 (Julian:146)
Time:13:15 Mean Canopy Height: 102.8 cm Top Leaf Height: 83.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 13.14 4.12 9.03 7.99 7.05 7.58
Wet Biomass Density: 13.14 4.12 9.03 7.99 7.05 7.58
Dry Biomass Density:
Plant Water Density:

Wheat Field # 2 DATE: 6/1/82 (Julian:152)
Time:15:06 Mean Canopy Height: 102.2 cm Top Leaf Height: 86.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 13.41 2.26 5.22 6.57 4.68 5.44
Wet Biomass Density: 13.41 2.26 5.22 6.57 4.68 5.44
Dry Biomass Density:
Plant Water Density:

Wheat Field # 2 DATE: 6/2/82 (Julian:153)
Time:09:40 Mean Canopy Height: 103.3 cm Top Leaf Height: 87.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III.a.1-5

Wheat Field # 2 DATE: 6/4/82 (Julian:155)
Time: Mean Canopy Height: 94.2 cm Top Leaf Height: 73.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 15.44 2.35 6.13 6.79 5.09 6.07
Dry Biomass Density:
Plant Water Density:

Wheat Field # 2 DATE: 6/14/82 (Julian:165)
Time:14:38 Mean Canopy Height: 85.2 cm Top Leaf Height: 61.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 57.26 67.69 73.04 73.63 72.74 69.30
Wet Biomass Density: 12.00 1.61 5.90 7.17 4.89 5.64
Dry Biomass Density: 5.13 0.52 1.59 1.89 1.33 1.73
Plant Water Density: 6.87 1.09 4.31 5.28 3.56 3.91

Wheat Field # 2 DATE: 6/16/82 (Julian:167)
Time:09:35 Mean Canopy Height: 88.3 cm Top Leaf Height: 60.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 18.54 1.45 4.70 6.03 4.06 5.52
Dry Biomass Density:
Plant Water Density:

Wheat Field # 2 DATE: 6/21/82 (Julian:172)
Time:09:50 Mean Canopy Height: 94.0 cm Top Leaf Height: 70.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 44.68 55.28 64.64 67.88 65.47 58.41
Wet Biomass Density: 14.73 0.77 3.69 4.52 2.99 4.11
Dry Biomass Density: 8.15 0.34 1.30 1.45 1.03 1.71
Plant Water Density: 6.58 0.42 2.39 3.07 1.96 2.40

Wheat Field # 2 DATE: 6/25/82 (Julian:176)
Time:11:25 Mean Canopy Height: 92.0 cm Top Leaf Height: 67.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 16.01 1.17 3.76 5.84 3.59 4.79
Dry Biomass Density:
Plant Water Density:

Wheat Field # 2 DATE: 6/28/82 (Julian:179)
Time:15:00 Mean Canopy Height: 85.2 cm Top Leaf Height: 66.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 25.46 41.72 55.41 59.48 55.65 46.04
Wet Biomass Density: 9.84 1.00 2.56 3.81 2.46 3.23
Dry Biomass Density: 7.34 0.58 1.14 1.54 1.09 1.74
Plant Water Density: 2.51 0.42 1.42 2.27 1.37 1.49

III.a.1-6

Wheat Field # 2 DATE: 7/ 6/82 (Julian:187)
Time:10:49 Mean Canopy Height: 42.8 cm Top Leaf Height: 0. cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant 5 55
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 3 DATE: 4/30/82 (Julian:120)
Time:13:10 Mean Canopy Height: 42.0 cm Top Leaf Height: 42.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 72.73 81.38 83.09 79.93 79.93
Wet Biomass Density: 0 5.31 8.80 8.07 7.39 7.39
Dry Biomass Density: 0 1.45 1.64 1.36 1.48 1.48
Plant Water Density: 0 3.86 7.16 6.70 5.91 5.91

Wheat Field # 3 DATE: 5/ 3/82 (Julian:123)
Time:14:25 Mean Canopy Height: 51.0 cm Top Leaf Height: 51.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 83.96 81.70 80.28 81.76 81.76
Wet Biomass Density: 0 6.68 8.66 9.59 8.31 8.31
Dry Biomass Density: 0 1.07 1.58 1.89 1.52 1.52
Plant Water Density: 0 5.61 7.07 7.70 6.79 6.79

Wheat Field # 3 DATE: 5/ 7/82 (Julian:127)
Time:15:40 Mean Canopy Height: 55.3 cm Top Leaf Height: 55.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 81.24 79.74
Wet Biomass Density: 0 10.58 9.51 6.46 8.85 8.85
Dry Biomass Density: 0 1.98 1.31
Plant Water Density: 0 8.60 5.15

Wheat Field # 3 DATE: 5/14/82 (Julian:134)
Time:14:15 Mean Canopy Height: 72.3 cm Top Leaf Height: 72.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 80.01 80.15 81.92 80.74 80.74
Wet Biomass Density: 0 4.37 4.37 4.90 4.55 4.55
Dry Biomass Density: 0 0.87 0.87 0.89 0.88 0.88
Plant Water Density: 0 3.50 3.51 4.02 3.67 3.67

Wheat Field # 3 DATE: 5/17/82 (Julian:137)
Time:15:55 Mean Canopy Height: 78.3 cm Top Leaf Height: 78.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 0 7.31 8.13 6.76 7.40 7.40
Dry Biomass Density:
Plant Water Density:

III.a 1-7

Wheat Field # 3 DATE: 5/19/82 (Julian:139)
Time:14:15 Mean Canopy Height: 83.5 cm Top Leaf Height: 79.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 0 5.31 9.85 9.21 8.13 8.13
Dry Biomass Density:
Plant Water Density:

Wheat Field # 3 DATE: 5/21/82 (Julian:141)
Time:14:36 Mean Canopy Height: 89.5 cm Top Leaf Height: 80.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 0 5.73 7.66 10.07 7.82 7.82
Dry Biomass Density:
Plant Water Density:

Wheat Field # 3 DATE: 5/24/82 (Julian:144)
Time: Mean Canopy Height: 100.7 cm Top Leaf Height: 83.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 3 DATE: 5/26/82 (Julian:146)
Time:14:21 Mean Canopy Height: 104.8 cm Top Leaf Height: 78.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 7 18 1.30 4.59 5.77 3.89 4.19
Dry Biomass Density:
Plant Water Density:

Wheat Field # 3 DATE: 6/ 1/82 (Julian:152)
Time:13:00 Mean Canopy Height: 109.7 cm Top Leaf Height: 79.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 14.34 2.82 6.27 6.71 5.27 6.07
Dry Biomass Density:
Plant Water Density:

Wheat Field # 3 DATE: 6/ 2/82 (Julian:153)
Time:12:22 Mean Canopy Height: 91.2 cm Top Leaf Height: 68.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 12.15 2.47 5.69 6.71 4.96 5.72
Dry Biomass Density:
Plant Water Density:

III.a.1-8

Wheat Field # 3 DATE: 6/ 4/82 (Julian:155)
 Time: Mean Canopy Height: 82.5 cm Top Leaf Height: 67.8 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 11.94 2.28 5.70 6.67 4.88 5.71
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 3 DATE: 6/ 7/82 (Julian:158)
 Time:10:05 Mean Canopy Height: 76.7 cm Top Leaf Height: 62.2 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 17.10 3.57 7.21 8.60 6.46 7.81
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 3 DATE: 6/ 9/82 (Julian:160)
 Time:13:54 Mean Canopy Height: 85.3 cm Top Leaf Height: 67.0 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 54.74 66.10 72.52 74.16 72.36 68.93
 Wet Biomass Density: 9.60 2.23 5.83 7.22 5.09 5.61
 Dry Biomass Density: 4.35 0.75 1.60 1.87 1.41 1.74
 Plant Water Density: 5.26 1.47 4.23 5.35 3.69 3.86

Wheat Field # 3 DATE: 6/14/82 (Julian:165)
 Time:15:20 Mean Canopy Height: 101.7 cm Top Leaf Height: 72.3 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 58.18 64.80 71.45 70.88 70.03 66.49
 Wet Biomass Density: 14.31 1.87 4.13 4.64 3.54 4.57
 Dry Biomass Density: 5.99 0.66 1.18 1.35 1.06 1.53
 Plant Water Density: 8.33 1.21 2.95 3.29 2.48 3.04

Wheat Field # 3 DATE: 6/16/82 (Julian:167)
 Time:10:27 Mean Canopy Height: 98.7 cm Top Leaf Height: 71.8 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 15.08 1.08 4.08 6.08 3.75 4.86
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 3 DATE: 6/18/82 (Julian:169)
 Time:13:24 Mean Canopy Height: 94.2 cm Top Leaf Height: 73.0 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 13.52 2.84 3.38 3.63 3.28 4.34
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 3 DATE: 6/21/82 (Julian:172)
 Time:09:57 Mean Canopy Height: 102.0 cm Top Leaf Height: 70.7 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 46.70 54.26 65.83 70.63 67.06 60.71
 Wet Biomass Density: 10.82 0.88 2.61 4.05 2.51 3.30
 Dry Biomass Density: 5.77 0.40 0.89 1.19 0.83 1.30
 Plant Water Density: 5.05 0.48 1.72 2.86 1.68 2.00

Wheat Field # 3 DATE: 6/23/82 (Julian:174)
 Time: Mean Canopy Height: 91.2 cm Top Leaf Height: 68.3 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 17.61 1.87 4.33 5.79 4.00 5.44
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 3 DATE: 6/25/82 (Julian:176)
 Time:13:00 Mean Canopy Height: 92.3 cm Top Leaf Height: 69.5 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 10.49 1.49 2.88 3.94 2.77 3.58
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 3 DATE: 6/28/82 (Julian:179)
 Time:14:00 Mean Canopy Height: 92.0 cm Top Leaf Height: 65.2 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 26.27 49.50 63.84 68.11 63.80 53.42
 Wet Biomass Density: 10.64 1.48 3.48 4.88 3.28 4.06
 Dry Biomass Density: 7.84 0.75 1.26 1.56 1.19 1.89
 Plant Water Density: 2.79 0.73 2.22 3.32 2.09 2.17

Wheat Field # 3 DATE: 7/ 6/82 (Julian:187)
 Time:10:40 Mean Canopy Height: 39.7 cm Top Leaf Height: 0. cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 3 DATE: 7/ 7/82 (Julian:188)
 Time:14:40 Mean Canopy Height: 38.2 cm Top Leaf Height: 0. cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 4 DATE: 4/30/82 (Julian:120)
Time:14:20 Mean Canopy Height: 35.7 cm Top Leaf Height: 35.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 80.72 81.06 79.74 80.68 80.68
Wet Biomass Density: 0. 5.24 10.33 4.44 6.67 6.67
Dry Biomass Density: 0. 1.01 1.96 0.90 1.29 1.29
Plant Water Density: 0. 4.23 8.38 3.54 5.38 5.38

Wheat Field # 4 DATE: 5/ 3/82 (Julian:123)
Time:13:42 Mean Canopy Height: 49.0 cm Top Leaf Height: 49.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 83.37 82.49 82.38 82.72 82.72
Wet Biomass Density: 0. 5.86 5.29 7.72 6.29 6.29
Dry Biomass Density: 0. 0.97 0.93 1.36 1.09 1.09
Plant Water Density: 0. 4.88 4.36 6.36 5.20 5.20

Wheat Field # 4 DATE: 5/ 7/82 (Julian:127)
Time:14:30 Mean Canopy Height: 54.0 cm Top Leaf Height: 54.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 81.89 79.84
Wet Biomass Density: 0. 7.74 8.48 3.94 6.72 6.72
Dry Biomass Density: 0. 1.40 0.79
Plant Water Density: 0 6.34 3.14

Wheat Field # 4 DATE: 5/14/82 (Julian:134)
Time:14:26 Mean Canopy Height: 74.3 cm Top Leaf Height: 74.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 83.17 85.72 84.38 84.41 84.41
Wet Biomass Density: 0. 7.45 7.18 6.96 7.20 7.20
Dry Biomass Density: 0. 1.25 1.03 1.09 1.12 1.12
Plant Water Density: 0. 6.20 6.16 5.87 6.07 6.07

Wheat Field # 4 DATE: 5/17/82 (Julian:137)
Time: Mean Canopy Height: 78.7 cm Top Leaf Height: 78.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 81.91 78.05 83.65 81.72 81.72
Wet Biomass Density: 0. 5.45 3.32 5.81 4.86 4.86
Dry Biomass Density: 0. 0.99 0.73 0.95 0.89 0.89
Plant Water Density: 0. 4.47 2.59 4.86 3.97 3.97

Wheat Field # 4 DATE: 5/21/82 (Julian:141)
Time:10:25 Mean Canopy Height: 94.5 cm Top Leaf Height: 79.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 3.94 8.13 9.55 7.21 7.21
Wet Biomass Density: 0. 3.94 8.13 9.55 7.21 7.21
Dry Biomass Density: 0. 3.94 8.13 9.55 7.21 7.21
Plant Water Density: 0. 3.94 8.13 9.55 7.21 7.21

III.a 1-11

Wheat Field # 4 DATE: 5/24/82 (Julian:144)
Time:10:05 Mean Canopy Height: 97.7 cm Top Leaf Height: 84.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 7.52 0.84 4.62 6.25 3.90 4.25
Wet Biomass Density: 7.52 0.84 4.62 6.25 3.90 4.25
Dry Biomass Density: 7.52 0.84 4.62 6.25 3.90 4.25
Plant Water Density: 7.52 0.84 4.62 6.25 3.90 4.25

Wheat Field # 4 DATE: 5/28/82 (Julian 148)
Time:13:13 Mean Canopy Height: 104.0 cm Top Leaf Height: 80.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 8.38 1.98 4.32 4.39 3.56 4.00
Wet Biomass Density: 8.38 1.98 4.32 4.39 3.56 4.00
Dry Biomass Density: 8.38 1.98 4.32 4.39 3.56 4.00
Plant Water Density: 8.38 1.98 4.32 4.39 3.56 4.00

Wheat Field # 4 DATE: 6/ 4/82 (Julian:155)
Time:15:31 Mean Canopy Height: 103.8 cm Top Leaf Height: 73.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 15.75 2.12 4.70 5.95 4.25 5.30
Wet Biomass Density: 15.75 2.12 4.70 5.95 4.25 5.30
Dry Biomass Density: 15.75 2.12 4.70 5.95 4.25 5.30
Plant Water Density: 15.75 2.12 4.70 5.95 4.25 5.30

Wheat Field # 4 DATE: 6/29/82 (Julian:180)
Time:14:00 Mean Canopy Height: 89.5 cm Top Leaf Height: 73.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 13.36 11.42 48.83 20.91 28.39 22.40
Wet Biomass Density: 7.21 0.90 1.40 1.78 1.36 2.01
Dry Biomass Density: 6.25 0.80 0.72 1.41 0.98 1.56
Plant Water Density: 0.96 0.10 0.68 0.37 0.39 0.45

Wheat Field # 4 DATE: 7/ 6/82 (Julian:187)
Time:14:00 Mean Canopy Height: 84.5 cm Top Leaf Height: 71.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 13.36 11.42 48.83 20.91 28.39 22.40
Wet Biomass Density: 7.21 0.90 1.40 1.78 1.36 2.01
Dry Biomass Density: 6.25 0.80 0.72 1.41 0.98 1.56
Plant Water Density: 0.96 0.10 0.68 0.37 0.39 0.45

Wheat Field # 4 DATE: 7/ 7/82 (Julian:188)
Time:15:15 Mean Canopy Height: 86.0 cm Top Leaf Height: 86.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 6.28 0.58 0.99 1.97 1.18 1.74
Wet Biomass Density: 6.28 0.58 0.99 1.97 1.18 1.74
Dry Biomass Density: 6.28 0.58 0.99 1.97 1.18 1.74
Plant Water Density: 6.28 0.58 0.99 1.97 1.18 1.74

III.a.1-12

Wheat Field # 4 DATE: 7/12/82 (Julian:193)
Time:11:17 Mean Canopy Height: 22.6 cm Top Leaf Height: 0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 4/30/82 (Julian:120)
Time:14:35 Mean Canopy Height: 26.7 cm Top Leaf Height: 26.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 5/3/82 (Julian:123)
Time:13:51 Mean Canopy Height: 37.7 cm Top Leaf Height: 37.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 5/7/82 (Julian:127)
Time:14:45 Mean Canopy Height: 41.0 cm Top Leaf Height: 41.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 5/14/82 (Julian:134)
Time:14:35 Mean Canopy Height: 53.0 cm Top Leaf Height: 53.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 5/17/82 (Julian:137)
Time:16:19 Mean Canopy Height: 65.7 cm Top Leaf Height: 65.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III.a.1-13

Wheat Field # 5 DATE: 5/21/82 (Julian:141)
Time:11:40 Mean Canopy Height: 86.0 cm Top Leaf Height: 75.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 5/24/82 (Julian:144)
Time:10:32 Mean Canopy Height: 90.2 cm Top Leaf Height: 75.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 6/1/82 (Julian:152)
Time:14:30 Mean Canopy Height: 82.8 cm Top Leaf Height: 62.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 6/2/82 (Julian:153)
Time:13:35 Mean Canopy Height: 83.8 cm Top Leaf Height: 65.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 6/7/82 (Julian:158)
Time:11:07 Mean Canopy Height: 67.8 cm Top Leaf Height: 57.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 5 DATE: 6/9/82 (Julian:160)
Time:15:17 Mean Canopy Height: 59.8 cm Top Leaf Height: 58.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III.a.1-14

Wheat Field # 5 DATE: 6/16/82 (Julian:167)
 Time:13:47 Mean Canopy Height: 60.3 cm Top Leaf Height: 50.0 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 48.07 56.45 66.27 68.86 65.50 60.02
 Wet Biomass Density: 11.11 2.37 5.34 5.18 4.30 5.32
 Dry Biomass Density: 5.77 1.03 1.80 1.61 1.48 2.13
 Plant Water Density: 5.34 1.34 3.54 3.57 2.81 3.19

Wheat Field # 5 DATE: 6/18/82 (Julian:169)
 Time:11:20 Mean Canopy Height: 56.3 cm Top Leaf Height: 47.2 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 14.41 3.42 7.87 9.91 7.07 8.25
 Wet Biomass Density: 14.41 3.42 7.87 9.91 7.07 8.25
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 5 DATE: 6/21/82 (Julian:172)
 Time:14:20 Mean Canopy Height: 56.0 cm Top Leaf Height: 45.2 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 39.26 53.48 66.43 67.10 64.33 57.50
 Wet Biomass Density: 11.49 3.27 7.33 7.26 5.95 6.85
 Dry Biomass Density: 6.98 1.52 2.46 2.39 2.12 2.91
 Plant Water Density: 4.51 1.75 4.87 4.87 3.83 3.94

Wheat Field # 5 DATE: 6/25/82 (Julian:176)
 Time:14:30 Mean Canopy Height: 63.5 cm Top Leaf Height: 47.3 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 10.89 1.43 3.67 5.08 3.40 4.47
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 5 DATE: 6/28/82 (Julian:179)
 Time:11:30 Mean Canopy Height: 65.3 cm Top Leaf Height: 47.2 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 15.84 83.05 53.37
 Wet Biomass Density: 11.54 5.18 4.24 6.16 5.19 6.08
 Dry Biomass Density: 9.71 0.88 1.97
 Plant Water Density: 1.83 4.30 2.26

Wheat Field # 5 DATE: 7/6/82 (Julian:187)
 Time:14:30 Mean Canopy Height: 24.3 cm Top Leaf Height: 0. cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

III.a 1-15

Wheat Field # 5 DATE: 7/9/82 (Julian:190)
 Time:10:37 Mean Canopy Height: 22.5 cm Top Leaf Height: 0. cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 5 DATE: 7/12/82 (Julian:193)
 Time:13:30 Mean Canopy Height: 23.5 cm Top Leaf Height: 0. cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Wheat Field # 6 DATE: 4/30/82 (Julian:120)
 Time:14:45 Mean Canopy Height: 23.3 cm Top Leaf Height: 23.3 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 0. 72.93 77.53 76.04 76.02 76.02
 Wet Biomass Density: 0. 3.24 6.52 5.27 5.01 5.01
 Dry Biomass Density: 0. 0.88 1.46 1.26 1.20 1.20
 Plant Water Density: 0. 2.36 5.05 4.01 3.81 3.81

Wheat Field # 6 DATE: 5/3/82 (Julian:123)
 Time:13:59 Mean Canopy Height: 31.7 cm Top Leaf Height: 31.7 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 0. 85.57 83.33 83.60 84.04 84.04
 Wet Biomass Density: 0. 4.43 6.56 4.72 5.24 5.24
 Dry Biomass Density: 0. 0.64 1.09 0.77 0.84 0.84
 Plant Water Density: 0. 3.79 5.46 3.95 4.40 4.40

Wheat Field # 6 DATE: 5/7/82 (Julian:127)
 Time:15:00 Mean Canopy Height: 40.0 cm Top Leaf Height: 40.0 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 0. 78.32 76.84 75.35 76.75 76.75
 Wet Biomass Density: 0. 4.51 3.92 5.27 4.57 4.57
 Dry Biomass Density: 0. 0.98 0.91 1.30 1.06 1.06
 Plant Water Density: 0. 3.53 3.01 3.97 3.51 3.51

Wheat Field # 6 DATE: 5/14/82 (Julian:134)
 Time:14:43 Mean Canopy Height: 55.7 cm Top Leaf Height: 55.7 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 0. 78.75 79.01 77.76 78.64 78.64
 Wet Biomass Density: 0. 4.54 4.96 2.67 4.06 4.06
 Dry Biomass Density: 0. 0.96 1.04 0.59 0.87 0.87
 Plant Water Density: 0. 3.57 3.92 2.08 3.19 3.19

III.a.1-16

Wheat Field # 6	DATE: 5/17/82 (Julian:137)	Wheat Field # 6	DATE: 6/ 9/82 (Julian:160)
Time:16:19 Mean Canopy Height:	61.0 cm Top Leaf Height: 61.0 cm	Time:15:27 Mean Canopy Height:	73.5 cm Top Leaf Height: 51.8 cm
Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant	Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:	0. 75.54 77 57 77.91 76 98 76.98	% Plant Moisture:	66.06 81.11 86.56 77.72 82.08 77.37
Wet Biomass Density:	0. 2.89 2.22 3 08 2.73 2.73	Wet Biomass Density:	16.27 2.52 5.61 5.21 4.45 5.65
Dry Biomass Density:	0. 0.71 0 50 0.68 0 63 0.63	Dry Biomass Density:	5.52 0.48 0.75 1.16 0.80 1.28
Plant Water Density:	0. 2.19 1.72 2.40 2.10 2 10	Plant Water Density:	10.75 2 05 4.86 4.05 3.65 4.37
Wheat Field # 6	DATE: 5/21/82 (Julian:141)	Wheat Field # 6	DATE: 6/16/82 (Julian:167)
Time:11:18 Mean Canopy Height:	86.8 cm Top Leaf Height: 65.8 cm	Time:13:50 Mean Canopy Height:	85.7 cm Top Leaf Height: 59.5 cm
Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant	Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:	0 2.19 3.72 4.67 3 53 3.53	% Plant Moisture:	45.22 60.22 56.16 55.73 56.66 51.80
Wet Biomass Density:		Wet Biomass Density:	14.32 0.96 2.01 2.62 1 86 2.95
Dry Biomass Density:		Dry Biomass Density:	7 85 0 38 0.88 1.16 0.81 1.42
Plant Water Density:		Plant Water Density:	6.48 0.58 1.13 1.46 1.05 1.53
Wheat Field # 6	DATE: 5/24/82 (Julian:144)	Wheat Field # 6	DATE: 6/18/82 (Julian:169)
Time:13:25 Mean Canopy Height:	92.3 cm Top Leaf Height: 71.3 cm	Time:10:53 Mean Canopy Height:	85.0 cm Top Leaf Height: 55.7 cm
Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant	Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:		% Plant Moisture:	
Wet Biomass Density:		Wet Biomass Density:	18.06 1.00 2 29 3 16 2 15 3.56
Dry Biomass Density:		Dry Biomass Density:	
Plant Water Density:		Plant Water Density:	
Wheat Field # 6	DATE: 6/ 1/82 (Julian:152)	Wheat Field # 6	DATE: 6/21/82 (Julian:172)
Time:14:11 Mean Canopy Height:	93.3 cm Top Leaf Height: 63.5 cm	Time:14:44 Mean Canopy Height:	88.3 cm Top Leaf Height: 60.3 cm
Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant	Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:		% Plant Moisture:	32.47 47.30 49 77 51.68 50.34 42.47
Wet Biomass Density:	13 08 0 47 2.63 3 80 2 30 3.17	Wet Biomass Density:	10 97 0.57 1 41 1 90 1.29 2.12
Dry Biomass Density:		Dry Biomass Density:	7.41 0.30 0 71 0 92 0.64 1.22
Plant Water Density:		Plant Water Density:	3.56 0 27 0.70 0.98 0.65 0.90
Wheat Field # 6	DATE: 6/ 2/82 (Julian:153)	Wheat Field # 6	DATE: 6/25/82 (Julian:176)
Time 13:55 Mean Canopy Height:	90.5 cm Top Leaf Height: 62 5 cm	Time:14:45 Mean Canopy Height:	77.2 cm Top Leaf Height: 56.5 cm
Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant	Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:		% Plant Moisture:	
Wet Biomass Density:	12 84 1 09 2.19 2.70 1.99 2.89	Wet Biomass Density:	9.35 0 80 1.46 2 21 1.49 2.25
Dry Biomass Density:		Dry Biomass Density:	
Plant Water Density:		Plant Water Density:	
Wheat Field # 6	DATE: 6/ 7/82 (Julian:158)	Wheat Field # 6	DATE: 6/28/82 (Julian:179)
Time:11:23 Mean Canopy Height:	66 0 cm Top Leaf Height: 46.2 cm	Time:12:15 Mean Canopy Height:	31.8 cm Top Leaf Height: 0 cm
Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant	Plant Parts:	Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:		% Plant Moisture:	
Wet Biomass Density:	15.24 1.92 3.54 4 32 3 26 4.62	Wet Biomass Density:	
Dry Biomass Density:		Dry Biomass Density:	
Plant Water Density:		Plant Water Density:	

Wheat Field # 7 DATE: 4/30/82 (Julian:120)
Time:15:02 Mean Canopy Height: 34.0 cm Top Leaf Height: 34.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 59.42 71.83
Wet Biomass Density: 0 2.73 6.16 5.12 4.67 4.67
Dry Biomass Density: 0 1.11 1.74
Plant Water Density: 0 1.62 4.43

Wheat Field # 7 DATE: 5/ 3/82 (Julian 123)
Time:14:10 Mean Canopy Height: 38.3 cm Top Leaf Height: 38.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 80.35 80.05 79.53 79.98 79.98
Wet Biomass Density: 0 5.48 8.39 5.87 6.58 6.58
Dry Biomass Density: 0 1.08 1.67 1.20 1.32 1.32
Plant Water Density: 0 4.40 6.72 4.67 5.26 5.26

Wheat Field # 7 DATE: 5/ 7/82 (Julian:127)
Time:15:55 Mean Canopy Height: 48.7 cm Top Leaf Height: 48.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 78.52 80.23
Wet Biomass Density: 0 5.23 9.57 2.88 5.89 5.89
Dry Biomass Density: 0 1.12 1.89
Plant Water Density: 0 4.10 7.67

Wheat Field # 7 DATE: 5/14/82 (Julian:134)
Time:15:02 Mean Canopy Height: 65.7 cm Top Leaf Height: 65.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 76.32 78.75 81.53 79.51 79.51
Wet Biomass Density: 0 3.18 3.79 6.46 4.48 4.48
Dry Biomass Density: 0 0.75 0.81 1.19 0.92 0.92
Plant Water Density: 0 2.43 2.99 5.26 3.56 3.56

Wheat Field # 7 DATE: 5/17/82 (Julian:137)
Time:16:36 Mean Canopy Height: 78.0 cm Top Leaf Height: 78.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 73.86
Wet Biomass Density: 0 4.26 6.23 4.03 4.84 4.84
Dry Biomass Density: 0 1.05
Plant Water Density: 0 2.97

Wheat Field # 7 DATE: 5/21/82 (Julian:141)
Time:11:22 Mean Canopy Height: 76.5 cm Top Leaf Height: 68.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 5.42 2.91 5.66 4.30 4.29 4.46
Wet Biomass Density: 4.46
Dry Biomass Density: 4.46
Plant Water Density: 4.46

III.a 1-19

Wheat Field # 7 DATE: 5/24/82 (Julian:144)
Time:13:22 Mean Canopy Height: 86.0 cm Top Leaf Height: 67.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 7 DATE: 6/ 1/82 (Julian:152)
Time:14:14 Mean Canopy Height: 88.8 cm Top Leaf Height: 65.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 11.12 1.20 6.48 8.14 5.28 6.04
Dry Biomass Density:
Plant Water Density:

Wheat Field # 7 DATE: 6/ 7/82 (Julian:158)
Time:11:25 Mean Canopy Height: 71.3 cm Top Leaf Height: 59.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 10.63 1.17 4.19 9.23 4.86 5.80
Dry Biomass Density:
Plant Water Density:

Wheat Field # 7 DATE: 6/ 9/82 (Julian:160)
Time:15:30 Mean Canopy Height: 80.0 cm Top Leaf Height: 58.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 64.07 58.73 65.48 64.56 64.09 64.08
Wet Biomass Density: 10.40 1.49 4.06 4.93 3.49 4.49
Dry Biomass Density: 3.74 0.61 1.40 1.75 1.25 1.61
Plant Water Density: 6.67 0.87 2.66 3.18 2.24 2.88

Wheat Field # 7 DATE: 6/16/82 (Julian:167)
Time:13:48 Mean Canopy Height: 84.5 cm Top Leaf Height: 57.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 54.84 61.02 63.82 64.62 63.59 60.02
Wet Biomass Density: 12.57 1.71 3.60 3.41 2.91 4.23
Dry Biomass Density: 5.68 0.67 1.30 1.21 1.06 1.69
Plant Water Density: 6.89 1.04 2.30 2.21 1.85 2.54

Wheat Field # 7 DATE: 6/18/82 (Julian:169)
Time:10:55 Mean Canopy Height: 80.2 cm Top Leaf Height: 54.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 14.51 1.77 4.14 5.05 3.65 5.22
Dry Biomass Density:
Plant Water Density:

III.a.1-20

Wheat Field # 7 DATE: 6/21/82 (Julian:172)
Time:14.45 Mean Canopy Height: 78.0 cm Top Leaf Height: 54.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 47.28 50.50 59.81 66.95 61.75 55.50
Wet Biomass Density: 11.19 1.34 2.52 3.85 2.57 3.85
Dry Biomass Density: 5.90 0.66 1.01 1.27 0.98 1.71
Plant Water Density: 5.29 0.68 1.51 2.57 1.59 2.14

Wheat Field # 7 DATE: 6/25/82 (Julian:176)
Time:14.47 Mean Canopy Height: 82.0 cm Top Leaf Height: 57.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 11.56 1.58 2.05 2.74 2.13 3.46
Wet Biomass Density: 11.56 1.58 2.05 2.74 2.13 3.46
Dry Biomass Density: 11.56 1.58 2.05 2.74 2.13 3.46
Plant Water Density: 11.56 1.58 2.05 2.74 2.13 3.46

Wheat Field # 7 DATE: 6/28/82 (Julian:179)
Time:12.13 Mean Canopy Height: 82.2 cm Top Leaf Height: 57.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 35.16 45.85 44.89 38.04 41.29 38.33
Wet Biomass Density: 7.38 0.58 1.19 2.13 1.30 2.16
Dry Biomass Density: 4.79 0.31 0.66 1.32 0.76 1.33
Plant Water Density: 2.60 0.26 0.54 0.81 0.54 0.83

Wheat Field # 7 DATE: 7/6/82 (Julian:187)
Time:10.42 Mean Canopy Height: 28.5 cm Top Leaf Height: 0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 6.40
Wet Biomass Density: 6.40
Dry Biomass Density: 6.40
Plant Water Density: 6.40

Wheat Field # 7 DATE: 7/12/82 (Julian:193)
Time: Mean Canopy Height: 31.8 cm Top Leaf Height: 0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0
Wet Biomass Density: 0
Dry Biomass Density: 0
Plant Water Density: 0

Wheat Field # 7 DATE: 7/13/82 (Julian:194)
Time:11.32 Mean Canopy Height: 18.7 cm Top Leaf Height: 0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0
Wet Biomass Density: 0
Dry Biomass Density: 0
Plant Water Density: 0

III.a.1-21

Wheat Field # 8 DATE: 4/30/82 (Julian:120)
Time:13:21 Mean Canopy Height: 33.7 cm Top Leaf Height: 33.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 78.92 79.68 75.53 78.61 78.61
Wet Biomass Density: 0. 3.36 8.01 3.14 4.83 4.83
Dry Biomass Density: 0. 0.71 1.63 0.77 1.03 1.03
Plant Water Density: 0. 2.65 6.38 2.37 3.80 3.80

Wheat Field # 8 DATE: 5/3/82 (Julian:123)
Time:14:33 Mean Canopy Height: 38.0 cm Top Leaf Height: 38.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 82.03 82.93 82.87 82.60 82.60
Wet Biomass Density: 0. 6.33 6.69 5.05 6.02 6.02
Dry Biomass Density: 0. 1.14 1.14 0.87 1.05 1.05
Plant Water Density: 0. 5.19 5.55 4.19 4.98 4.98

Wheat Field # 8 DATE: 5/7/82 (Julian:127)
Time:16:30 Mean Canopy Height: 48.3 cm Top Leaf Height: 48.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 83.44 82.49 82.35 82.80 82.80
Wet Biomass Density: 0. 7.46 5.88 6.69 6.68 6.68
Dry Biomass Density: 0. 1.24 1.03 1.18 1.15 1.15
Plant Water Density: 0. 6.22 4.85 5.51 5.53 5.53

Wheat Field # 8 DATE: 5/14/82 (Julian:134)
Time:15:15 Mean Canopy Height: 68.7 cm Top Leaf Height: 68.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 82.44 84.31 83.23 83.31 83.31
Wet Biomass Density: 0. 9.18 8.63 8.61 8.80 8.80
Dry Biomass Density: 0. 1.61 1.35 1.44 1.47 1.47
Plant Water Density: 0. 7.57 7.27 7.16 7.34 7.34

Wheat Field # 8 DATE: 5/21/82 (Julian:141)
Time:10:28 Mean Canopy Height: 89.7 cm Top Leaf Height: 68.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0.
Wet Biomass Density: 0. 2.28 3.85 5.55 3.89 3.89
Dry Biomass Density: 0.
Plant Water Density: 0.

Wheat Field # 8 DATE: 5/24/82 (Julian:144)
Time:10.02 Mean Canopy Height: 89.8 cm Top Leaf Height: 69.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 12.02 1.15 5.59 6.79 4.51 5.08
Wet Biomass Density: 12.02 1.15 5.59 6.79 4.51 5.08
Dry Biomass Density: 12.02 1.15 5.59 6.79 4.51 5.08
Plant Water Density: 12.02 1.15 5.59 6.79 4.51 5.08

III.a.1-22

Wheat Field # 8 DATE: 5/28/82 (Julian:148)
Time:13:26 Mean Canopy Height: 92.2 cm Top Leaf Height: 67.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 12 80 1.44 3.91 4.18 3 18 3 90
Wet Biomass Density: 15.60 1.06 3 20 3.60 2.62 3.66
Dry Biomass Density: 6.88 0 40 1.14 1.48 1 01 1 48
Plant Water Density: 8.72 0 66 2.06 2.12 1 61 2 19

Wheat Field # 8 DATE: 6/ 1/82 (Julian:152)
Time 13:26 Mean Canopy Height: 97.7 cm Top Leaf Height: 67.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 20.22 1.37 5 05 4.90 3 77 4 94
Wet Biomass Density: 17.42 1.92 4 06 4.30 3 43 4 47
Dry Biomass Density: 9.62 0 53 0 76 1 06 0 78 1 45
Plant Water Density: 6.64 0 57 1 04 1 32 0 98 1 40

Wheat Field # 8 DATE: 6/ 2/82 (Julian:153)
Time:12:50 Mean Canopy Height: 92.2 cm Top Leaf Height: 60.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 18 12 1.22 3.84 4.68 3 24 4 42
Wet Biomass Density: 15.60 1.06 3 20 3.60 2.62 3.66
Dry Biomass Density: 6.88 0 40 1.14 1.48 1 01 1 48
Plant Water Density: 8.72 0 66 2.06 2.12 1 61 2 19

Wheat Field # 8 DATE: 6/ 4/82 (Julian:155)
Time:14:31 Mean Canopy Height: 87.0 cm Top Leaf Height: 59.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 16 28 1.68 3 46 3 76 2 97 4 02
Wet Biomass Density: 15.60 1.06 3 20 3.60 2.62 3.66
Dry Biomass Density: 6.88 0 40 1.14 1.48 1 01 1 48
Plant Water Density: 8.72 0 66 2.06 2.12 1 61 2 19

Wheat Field # 8 DATE: 6/ 7/82 (Julian:158)
Time:10:24 Mean Canopy Height: 87.7 cm Top Leaf Height: 60.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 16 28 1.68 3 46 3 76 2 97 4 02
Wet Biomass Density: 15.60 1.06 3 20 3.60 2.62 3.66
Dry Biomass Density: 6.88 0 40 1.14 1.48 1 01 1 48
Plant Water Density: 8.72 0 66 2.06 2.12 1 61 2 19

Wheat Field # 8 DATE: 6/ 9/82 (Julian:160)
Time. Mean Canopy Height: 85.8 cm Top Leaf Height: 63.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 55.89 62 50 64 41 58.85 61.60 59 65
Wet Biomass Density: 15.60 1.06 3 20 3.60 2.62 3.66
Dry Biomass Density: 6.88 0 40 1.14 1.48 1 01 1 48
Plant Water Density: 8.72 0 66 2.06 2.12 1 61 2 19

III.a.1-23

Wheat Field # 8 DATE: 6/14/82 (Julian:165)
Time:16:03 Mean Canopy Height: 83 0 cm Top Leaf Height: 62 5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 52.94 61.72 64.84 65.13 64.28 59.68
Wet Biomass Density: 17 87 1.54 2 80 2 80 2 38 3 67
Dry Biomass Density: 8.41 0.59 0.98 0 98 0 85 1 48
Plant Water Density: 9 46 0 95 1.82 1.82 1 53 2 19

Wheat Field # 8 DATE: 6/16/82 (Julian:167)
Time: Mean Canopy Height: 83.2 cm Top Leaf Height: 58.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 6.06 0.97 2 27 2.52 1 92 2 26
Wet Biomass Density: 17 87 1.54 2 80 2 80 2 38 3 67
Dry Biomass Density: 8.41 0.59 0.98 0 98 0 85 1 48
Plant Water Density: 9 46 0 95 1.82 1.82 1 53 2 19

Wheat Field # 8 DATE: 6/18/82 (Julian:169)
Time: Mean Canopy Height: 83 3 cm Top Leaf Height: 57.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 20.61 0 95 2.62 3.61 2 39 3 90
Wet Biomass Density: 17 87 1.54 2 80 2 80 2 38 3 67
Dry Biomass Density: 8.41 0.59 0.98 0 98 0 85 1 48
Plant Water Density: 9 46 0 95 1.82 1.82 1 53 2 19

Wheat Field # 8 DATE: 6/21/82 (Julian:172)
Time:13:48 Mean Canopy Height: 91.3 cm Top Leaf Height: 60.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 40.86 51.86 57.62 55.47 55.45 49.17
Wet Biomass Density: 16 26 1 11 1 80 2 37 1 76 2 86
Dry Biomass Density: 9.62 0 53 0 76 1 06 0 78 1 45
Plant Water Density: 6.64 0 57 1 04 1 32 0 98 1 40

Wheat Field # 8 DATE: 6/25/82 (Julian:176)
Time:13:38 Mean Canopy Height: 88 2 cm Top Leaf Height: 62.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 17.98 0 81 1.92 3.63 2 12 3 36
Wet Biomass Density: 17.98 0 81 1.92 3.63 2 12 3 36
Dry Biomass Density: 17.98 0 81 1.92 3.63 2 12 3 36
Plant Water Density: 17.98 0 81 1.92 3.63 2 12 3 36

Wheat Field # 8 DATE: 6/28/82 (Julian:179)
Time:10:45 Mean Canopy Height: 82.0 cm Top Leaf Height: 58.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 19.14 29.51 45.93 48.10 45.82 35.03
Wet Biomass Density: 14 97 0 52 1 93 3 63 2 03 3 12
Dry Biomass Density: 12 11 0 37 1 05 1 88 1 10 2 02
Plant Water Density: 2 87 0 15 0 89 1 74 0 93 1 09

III.a.1-24

Wheat Field # 8 DATE: 7/ 7/82 (Julian:188)
Time:15:19 Mean Canopy Height: 33.7 cm Top Leaf Height: 0. cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant 15.85
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 9 DATE: 4/30/82 (Julian:120)
Time:13:34 Mean Canopy Height: 27 0 cm Top Leaf Height: 27 0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 66.08 65.26 65.64 65.73 65.73
Wet Biomass Density: 0. 3.43 2.17 1.97 2.52 2.52
Dry Biomass Density: 0. 1.16 0.75 0.68 0.86 0.86
Plant Water Density: 0. 2.27 1.42 1.29 1.66 1.66

Wheat Field # 9 DATE: 5/ 3/82 (Julian:123)
Time:15:10 Mean Canopy Height: 37 3 cm Top Leaf Height: 37.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 68.54 74.42 78.76 75.67 75.67
Wet Biomass Density: 0. 2.52 5.08 7.89 5.16 5.16
Dry Biomass Density: 0. 0.79 1.30 1.68 1.26 1.26
Plant Water Density: 0. 1.72 3.78 6.21 3.91 3.91

Wheat Field # 9 DATE: 5/ 7/82 (Julian:127)
Time:16:45 Mean Canopy Height: 46.7 cm Top Leaf Height: 46.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 79.36 82.53 79.04 80.74 80.74
Wet Biomass Density: 0. 4.31 9.62 6.57 6.83 6.83
Dry Biomass Density: 0. 0.89 1.68 1.38 1.32 1.32
Plant Water Density: 0. 3.42 7.94 5.19 5.52 5.52

Wheat Field # 9 DATE: 5/14/82 (Julian:134)
Time:15:47 Mean Canopy Height: 58.3 cm Top Leaf Height: 58.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0. 81.41 72.80
Wet Biomass Density: 0. 8.27 8.47 2.86 6.53 6.53
Dry Biomass Density: 0. 1.57 0.78
Plant Water Density: 0. 6.89 2.08

Wheat Field # 9 DATE: 5/19/82 (Julian:139)
Time:15:30 Mean Canopy Height: 68.0 cm Top Leaf Height: 58.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 6.18 2.44 4.60 5.91 4.32 4.53
Dry Biomass Density:
Plant Water Density:

Wheat Field # 9 DATE: 5/21/82 (Julian:141)
Time:16:03 Mean Canopy Height: 68.5 cm Top Leaf Height: 56.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 0 1.86 3.57 4.47 3 30 3 30
Dry Biomass Density:
Plant Water Density:

Wheat Field # 9 DATE: 5/24/82 (Julian:144)
Time:14:20 Mean Canopy Height: 68.2 cm Top Leaf Height: 60 0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 9 DATE: 5/26/82 (Julian:146)
Time:11:01 Mean Canopy Height: 75 3 cm Top Leaf Height: 57.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 5 26 1 16 3.11 4.24 2.84 3 09
Dry Biomass Density:
Plant Water Density:

Wheat Field # 9 DATE: 6/ 1/82 (Julian:152)
Time:10:20 Mean Canopy Height: 71.3 cm Top Leaf Height: 50.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 5.95 0.57 2.17 2.79 1 84 2 30
Dry Biomass Density:
Plant Water Density:

Wheat Field # 9 DATE: 6/ 2/82 (Julian:153)
Time:15:20 Mean Canopy Height: 72.8 cm Top Leaf Height: 54 2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density: 8 16 1.13 3 36 3.84 2.78 3 36
Dry Biomass Density:
Plant Water Density:

Wheat Field # 9 DATE: 6/ 4/82 (Julian:155)
Time:10:07 Mean Canopy Height: 65.3 cm Top Leaf Height: 47.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Wheat Field # 9 DATE: 6/ 7/82 (Julian:158)
Time:14:24 Mean Canopy Height: 67.5 cm Top Leaf Height: 51.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 10.55 0.86 2.35 3.00 2.07 3.06
Wet Biomass Density: 2.07 2.07 2.07 2.07 2.07 2.07
Dry Biomass Density: 2.07 2.07 2.07 2.07 2.07 2.07
Plant Water Density: 2.07 2.07 2.07 2.07 2.07 2.07

Wheat Field # 9 DATE: 6/16/82 (Julian:165)
Time:10:36 Mean Canopy Height: 64.0 cm Top Leaf Height: 49.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 51.08 56.85 60.33 59.96 59.55 55.86
Wet Biomass Density: 11.87 1.23 3.20 2.06 2.17 3.36
Dry Biomass Density: 5.81 0.53 1.27 0.83 0.88 1.48
Plant Water Density: 6.06 0.70 1.93 1.24 1.29 1.88

Wheat Field # 9 DATE: 6/16/82 (Julian:167)
Time:15:06 Mean Canopy Height: 66.7 cm Top Leaf Height: 51.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 12.41 1.00 2.12 2.53 1.88 3.13
Wet Biomass Density: 1.88 1.88 1.88 1.88 1.88 1.88
Dry Biomass Density: 1.88 1.88 1.88 1.88 1.88 1.88
Plant Water Density: 1.88 1.88 1.88 1.88 1.88 1.88

Wheat Field # 9 DATE: 6/21/82 (Julian:172)
Time:11:15 Mean Canopy Height: 68.3 cm Top Leaf Height: 50.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 36.69 56.37 45.42 52.02 49.73 44.14
Wet Biomass Density: 7.79 0.62 1.82 1.62 1.35 2.10
Dry Biomass Density: 4.93 0.27 0.99 0.78 0.68 1.17
Plant Water Density: 2.86 0.35 0.83 0.84 0.67 0.93

Wheat Field # 9 DATE: 6/25/82 (Julian:176)
Time:10:10 Mean Canopy Height: 66.3 cm Top Leaf Height: 51.8 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 6.77 0.44 1.51 2.15 1.37 2.01
Wet Biomass Density: 2.01 2.01 2.01 2.01 2.01 2.01
Dry Biomass Density: 2.01 2.01 2.01 2.01 2.01 2.01
Plant Water Density: 2.01 2.01 2.01 2.01 2.01 2.01

Wheat Field # 9 DATE: 6/28/82 (Julian:179)
Time:15:00 Mean Canopy Height: 67.0 cm Top Leaf Height: 48.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 32.65 31.46 28.28 37.17 33.25 33.06
Wet Biomass Density: 3.68 0.54 1.03 1.55 1.04 1.35
Dry Biomass Density: 2.48 0.37 0.74 0.97 0.69 0.90
Plant Water Density: 1.20 0.17 0.29 0.57 0.34 0.45

III.a.1-27

Wheat Field # 9 DATE: 7/ 2/82 (Julian:183)
Time:10:33 Mean Canopy Height: 64.8 cm Top Leaf Height: 20.58 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 6.99 0.79 1.52 1.47 1.26 1.96
Wet Biomass Density: 1.26 1.26 1.26 1.26 1.26 1.26
Dry Biomass Density: 1.26 1.26 1.26 1.26 1.26 1.26
Plant Water Density: 1.26 1.26 1.26 1.26 1.26 1.26

Wheat Field # 9 DATE: 7/ 7/82 (Julian:188)
Time:10:33 Mean Canopy Height: 65.7 cm Top Leaf Height: 20.58 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 6.14 39.96 20.97 23.70 26.92 20.58
Wet Biomass Density: 6.86 1.62 2.09 2.71 2.14 2.71
Dry Biomass Density: 6.44 0.97 1.65 2.07 1.56 2.15
Plant Water Density: 0.42 0.65 0.44 0.64 0.58 0.56

Wheat Field # 9 DATE: 7/ 9/82 (Julian:190)
Time:15:21 Mean Canopy Height: 28.3 cm Top Leaf Height: 0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 0 0 0 0 0
Wet Biomass Density: 0 0 0 0 0 0
Dry Biomass Density: 0 0 0 0 0 0
Plant Water Density: 0 0 0 0 0 0

Wheat Field #10 DATE: 4/30/82 (Julian:120)
Time:15:45 Mean Canopy Height: 25.0 cm Top Leaf Height: 25.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 70.13 70.76 76.67 73.72 73.72
Wet Biomass Density: 0 2.64 2.83 6.03 3.83 3.83
Dry Biomass Density: 0 0.79 0.83 1.41 1.01 1.01
Plant Water Density: 0 1.85 2.01 4.62 2.83 2.83

Wheat Field #10 DATE: 5/ 3/82 (Julian:123)
Time:15:30 Mean Canopy Height: 35.0 cm Top Leaf Height: 35.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 73.50 70.81 74.20 73.09 73.09
Wet Biomass Density: 0 4.35 2.86 4.26 3.82 3.82
Dry Biomass Density: 0 1.15 0.83 1.10 1.03 1.03
Plant Water Density: 0 3.20 2.02 3.16 2.79 2.79

Wheat Field #10 DATE: 5/14/82 (Julian:134)
Time:16:15 Mean Canopy Height: 52.0 cm Top Leaf Height: 52.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 0 78.03 77.95 77.27 77.74 77.74
Wet Biomass Density: 0 5.73 3.55 5.05 4.78 4.78
Dry Biomass Density: 0 1.26 0.78 1.15 1.06 1.06
Plant Water Density: 0 4.47 2.77 3.90 3.72 3.72

III.a.1-28

Wheat Field #10 DATE: 5/24/82 (Julian:144)
Time:14:20 Mean Canopy Height: 75.5 cm Top Leaf Height: 55.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 5/26/82 (Julian:146)
Time:09:43 Mean Canopy Height: 74.7 cm Top Leaf Height: 58.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/1/82 (Julian:152)
Time:10:50 Mean Canopy Height: 82.8 cm Top Leaf Height: 60.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/4/82 (Julian:155)
Time:10:52 Mean Canopy Height: 84.7 cm Top Leaf Height: 62.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/7/82 (Julian:158)
Time:12:05 Mean Canopy Height: 77.5 cm Top Leaf Height: 53.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/9/82 (Julian:160)
Time:13:17 Mean Canopy Height: 77.5 cm Top Leaf Height: 54.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

III.a.1-29

Wheat Field #10 DATE: 6/14/82 (Julian:165)
Time:10:10 Mean Canopy Height: 79.2 cm Top Leaf Height: 52.5 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/16/82 (Julian:167)
Time:15:00 Mean Canopy Height: 74.8 cm Top Leaf Height: 53.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/18/82 (Julian:169)
Time:14:06 Mean Canopy Height: 77.0 cm Top Leaf Height: 54.7 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/21/82 (Julian:172)
Time:11:50 Mean Canopy Height: 73.0 cm Top Leaf Height: 53.0 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/25/82 (Julian:176)
Time: Mean Canopy Height: 69.3 cm Top Leaf Height: 52.2 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

Wheat Field #10 DATE: 6/28/82 (Julian:179)
Time:15:40 Mean Canopy Height: 72.0 cm Top Leaf Height: 52.3 cm
Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
% Plant Moisture: 50.49 51.78 52.92 55.40 53.83 52.37
Wet Biomass Density: 7.83 0.55 1.34 1.49 1.12 1.79
Dry Biomass Density: 3.88 0.26 0.63 0.66 0.52 0.85
Plant Water Density: 3.95 0.28 0.71 0.82 0.61 0.94

III.a 1-30

Wheat Field #10 DATE: 7/ 2/82 (Julian:183)
 Time:10:13 Mean Canopy Height: 68.5 cm Top Leaf Height: 50.7 cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 4.90 0.33 1.10 0.41 0.61 1.11
 Dry Biomass Density:
 Plant Water Density:

Wheat Field #10 DATE: 7/ 7/82 (Julian:188)
 Time:11:10 Mean Canopy Height: 30.2 cm Top Leaf Height: 0. cm
 Plant Parts: Head Top1/3 Mid1/3 Low1/3 All Layers Whole Plant
 % Plant Moisture: 4.49
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Appendix III.a.2
Wheat Vegetation Density Data

Field	Row Separation			Number of Plant Stems per 15 cm Row			Number of Heads per 15 cm Row			Head Length (cm)			Number of Plants per Meter of Row	Number of Plant Stems per m ²
	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N		
1	12.9	3.6	18	34.1	13.7	18	37.9	14.7	12	9.2	0.7	6	227.3	1762.3
2	14.3	1.2	18	16.6	9.5	18	28.2	10.4	12	8.9	0.9	6	177.3	1240.1
3	14.8	0.7	18	18.2	5.0	18	21.3	5.9	12	9.7	1.5	6	121.3	819.8
4	16.8	1.5	6	22.3	1.6	6	--	--	--	9.4	1.1	6	148.7	884.9
5	16.1	0.7	18	22.4	13.6	18	25.2	12.7	12	9.1	0.7	6	149.3	927.5
6	15.3	0.7	18	15.1	6.7	18	15.8	7.8	12	7.5	0.9	6	100.7	658.0
7	17.2	0.9	18	15.9	5.6	18	17.1	6.2	12	11.6	0.5	6	106.0	616.3
8	15.9	1.6	18	25.1	5.2	18	25.3	5.8	12	6.9	0.7	6	167.3	1052.4
9	15.7	1.0	18	11.2	3.0	18	11.5	3.3	12	7.9	1.0	6	74.7	475.8
10	15.9	2.4	18	15.0	3.3	18	14.7	3.2	12	7.9	0.8	6	100.0	628.9

Appendix III.a.3
Wheat Field Soil Moisture Data

Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 4/12/82 (Julian: 102)	Time: 15:10		
			Mean	S.D.	S.D./Mean
			23.29	2.93	1.26
			23.29	2.93	1.26
			23.29	2.93	1.26
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 4/16/82 (Julian: 106)	Time: 12:55		
			Mean	S.D.	S.D./Mean
			19.68	5.49	2.79
			19.68	5.49	2.79
			19.68	5.49	2.79
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 4/19/82 (Julian: 109)	Time: 12:55		
			Mean	S.D.	S.D./Mean
			16.98	2.72	1.60
			16.98	2.72	1.60
			16.98	2.72	1.60
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 4/26/82 (Julian: 116)	Time: 12:45		
			Mean	S.D.	S.D./Mean
			19.23	2.33	1.21
			19.23	2.33	1.21
			19.23	2.33	1.21
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 4/30/82 (Julian: 120)	Time: 12:45		
			Mean	S.D.	S.D./Mean
			24.44	1.74	0.71
			24.44	1.74	0.71
			24.44	1.74	0.71
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/ 3/82 (Julian: 123)	Time: 13:15		
			Mean	S.D.	S.D./Mean
			43.56	1.71	0.39
			43.56	1.71	0.39
			43.56	1.71	0.39
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/ 7/82 (Julian: 127)	Time: 14:05		
			Mean	S.D.	S.D./Mean
			26.86	0.51	0.19
			26.86	0.51	0.19
			26.86	0.51	0.19
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/10/82 (Julian: 130)	Time: 14:00		
			Mean	S.D.	S.D./Mean
			22.25	2.82	1.27
			22.25	2.82	1.27
			22.25	2.82	1.27

III.a 3-1

Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/14/82 (Julian: 134)	Time: 13:45		
			Mean	S.D.	S.D./Mean
			29.75	2.43	0.82
			29.75	2.43	0.82
			29.75	2.43	0.82
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/17/82 (Julian: 137)	Time: 15:09		
			Mean	S.D.	S.D./Mean
			33.14	2.08	0.63
			33.14	2.08	0.63
			33.14	2.08	0.63
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/19/82 (Julian: 139)	Time: 10:26		
			Mean	S.D.	S.D./Mean
			31.18	3.61	1.16
			31.02	2.40	0.86
			32.99	2.88	0.98
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/21/82 (Julian: 141)	Time: 15:10		
			Mean	S.D.	S.D./Mean
			28.97	28.98	0.68
			28.91	28.97	1.78
			28.97	28.98	1.34
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/26/82 (Julian: 146)	Time:		
			Mean	S.D.	S.D./Mean
			33.08	2.26	0.68
			32.90	31.41	1.99
			32.70	32.08	2.10
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 6/ 1/82 (Julian: 152)	Time: 15:07		
			Mean	S.D.	S.D./Mean
			36.04	1.76	0.49
			32.10	34.22	1.58
			34.07	34.95	1.65
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 6/ 4/82 (Julian: 155)	Time: 14:25		
			Mean	S.D.	S.D./Mean
			42.57	33.43	5.98
			38.83	32.82	3.51
			40.33	33.06	4.50
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 1 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 6/14/82 (Julian: 165)	Time: 14:40		
			Mean	S.D.	S.D./Mean
			36.52	1.41	0.39
			34.92	34.42	0.53
			35.05	35.26	0.88

III a.3-2

Field#: 1 Date: 6/16/82 (Julian: 167) Time: 09:14			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	37.73	43.73	36.30
2-5 cm	39.49	42.33	35.89
0-5 cm	38.78	42.89	36.05
Time: 09:14			
	Mean	S.D.	S.D./Mean
	39.16	2.57	0.66
	39.76	3.34	0.84
	39.52	3.03	0.77
Field#: 1 Date: 6/21/82 (Julian: 172) Time: 09:38			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	36.61	39.63	37.53
2-5 cm	36.26	35.75	33.90
0-5 cm	36.40	37.30	35.35
Time: 09:38			
	Mean	S.D.	S.D./Mean
	36.45	1.94	0.53
	35.37	0.91	0.26
	35.81	1.32	0.37
Field#: 1 Date: 6/25/82 (Julian: 176) Time: 11:10			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	34.50	37.96	34.57
2-5 cm	32.83	33.50	33.71
0-5 cm	33.50	35.28	34.05
Time: 11:10			
	Mean	S.D.	S.D./Mean
	33.89	2.88	0.82
	33.56	2.55	0.76
	33.92	2.74	0.77
Field#: 1 Date: 6/28/82 (Julian: 179) Time: 13:50			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	36.52	35.11	33.86
2-5 cm	37.66	31.97	32.12
0-5 cm	37.20	33.23	32.82
Time: 13:50			
	Mean	S.D.	S.D./Mean
	36.78	3.57	0.97
	34.30	2.18	0.63
	35.29	2.74	0.77
Field#: 1 Date: 7/6/82 (Julian: 187) Time: 12:50			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	33.74	30.81	31.29
2-5 cm	33.53	31.83	31.57
0-5 cm	33.62	31.42	31.46
Time: 12:50			
	Mean	S.D.	S.D./Mean
	32.72	1.31	0.40
	32.30	0.97	0.30
	32.46	1.10	0.34
Field#: 1 Date: 7/7/82 (Julian: 188) Time: 13:40			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	32.14	30.76	30.15
2-5 cm	30.56	30.34	29.09
0-5 cm	31.19	30.51	29.51
Time: 13:40			
	Mean	S.D.	S.D./Mean
	32.27	1.80	0.56
	31.24	1.60	0.51
	31.65	1.68	0.53
Field#: 1 Date: 7/12/82 (Julian: 193) Time: 10:10			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	36.51	36.39	36.47
2-5 cm	30.43	36.73	32.79
0-5 cm	32.86	36.59	34.26
Time: 10:10			
	Mean	S.D.	S.D./Mean
	37.07	3.51	0.95
	33.09	2.33	0.70
	34.68	2.80	0.80
Field#: 1 Date: 7/13/82 (Julian: 194) Time: 14:00			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	28.92	32.24	20.48
2-5 cm	28.06	28.63	16.11
0-5 cm	28.41	30.08	17.86
Time: 14:00			
	Mean	S.D.	S.D./Mean
	28.12	5.27	1.87
	26.18	6.92	2.64
	26.95	6.26	2.34

III.a.3-3

Field#: 1 Date: 7/15/82 (Julian: 196) Time: 10:46			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	28.92	32.24	40.31
2-5 cm	28.06	28.63	36.95
0-5 cm	28.41	30.08	38.29
Time: 10:46			
	Mean	S.D.	S.D./Mean
	34.80	4.76	1.37
	31.90	3.32	1.04
	33.06	3.89	1.17
Field#: 2 Date: 4/12/82 (Julian: 102) Time: 15:20			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	11.47	12.98	13.99
2-5 cm	11.47	12.98	13.99
0-5 cm	11.47	12.98	13.99
Time: 15:20			
	Mean	S.D.	S.D./Mean
	12.81	1.26	0.99
	12.81	1.26	0.99
	12.81	1.26	0.99
Field#: 2 Date: 4/16/82 (Julian: 106) Time: 13:05			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	8.82	7.09	7.14
2-5 cm	8.82	7.09	7.14
0-5 cm	8.82	7.09	7.14
Time: 13:05			
	Mean	S.D.	S.D./Mean
	7.68	0.99	1.28
	7.68	0.99	1.28
	7.68	0.99	1.28
Field#: 2 Date: 4/19/82 (Julian: 109) Time: 12:50			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	13.95	9.29	10.19
2-5 cm	13.95	9.29	10.19
0-5 cm	13.95	9.29	10.19
Time: 12:50			
	Mean	S.D.	S.D./Mean
	11.14	2.48	2.22
	11.14	2.48	2.22
	11.14	2.48	2.22
Field#: 2 Date: 4/26/82 (Julian: 116) Time: 12:50			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	13.73	14.87	11.90
2-5 cm	13.73	14.87	11.90
0-5 cm	13.73	14.87	11.90
Time: 12:50			
	Mean	S.D.	S.D./Mean
	13.50	1.50	1.11
	13.50	1.50	1.11
	13.50	1.50	1.11
Field#: 2 Date: 4/30/82 (Julian: 120) Time: 12:50			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	25.08	22.90	24.08
2-5 cm	25.08	22.90	24.08
0-5 cm	25.08	22.90	24.08
Time: 12:50			
	Mean	S.D.	S.D./Mean
	24.02	1.09	0.45
	24.02	1.09	0.45
	24.02	1.09	0.45
Field#: 2 Date: 5/3/82 (Julian: 123) Time: 13:20			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	41.46	41.94	42.79
2-5 cm	41.46	41.94	42.79
0-5 cm	41.46	41.94	42.79
Time: 13:20			
	Mean	S.D.	S.D./Mean
	42.06	0.67	0.16
	42.06	0.67	0.16
	42.06	0.67	0.16
Field#: 2 Date: 5/7/82 (Julian: 127) Time: 14:00			
Wheat	LOC 1	LOC 2	LOC 3
Depth	LOC 1	LOC 2	LOC 3
0-2 cm	28.47	28.83	30.61
2-5 cm	28.47	28.83	30.61
0-5 cm	28.47	28.83	30.61
Time: 14:00			
	Mean	S.D.	S.D./Mean
	29.31	1.15	0.39
	29.31	1.15	0.39
	29.31	1.15	0.39

III.a.3-4

Wheat	Field#: 2	Date: 5/10/82 (Julian: 130)	Time: 13:55	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	19 43 18.74 20.30	19.49	0.78	0.40
2-5 cm	19 43 18.74 20.30	19.49	0.78	0.40
0-5 cm	19.43 18.74 20.30	19.49	0.78	0.40
Wheat	Field#: 2	Date: 5/14/82 (Julian: 134)	Time: 13:50	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	32 16 30.34 30.96	31.15	0.92	0.30
2-5 cm	32 16 30.34 30.96	31 15	0.92	0.30
0-5 cm	32.16 30.34 30.96	31.15	0.92	0.30
Wheat	Field#: 2	Date: 5/17/82 (Julian: 137)	Time: 15:28	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	31.33 35.27 34.25	33 62	2 04	0 61
2-5 cm	31 33 35 27 34 25	33.62	2 04	0 61
0-5 cm	31.33 35.27 34.25	33.62	2.04	0.61
Wheat	Field#: 2	Date: 5/19/82 (Julian: 139)	Time: 10:50	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	27.20 28.12 27.92 32.85 34.08 31.32	30.25	2 89	0.96
2-5 cm	26.49 25.86 26.45 34.10 29.40 33.32	29.27	3.66	1.25
0-5 cm	26 77 26.76 27 04 33.60 31.27 32 52	29 66	3 35	1 13
Wheat	Field#: 2	Date: 5/21/82 (Julian: 141)	Time: 15:07	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	37.02 32.69 32.24 31 54 32.24 30.74	32 74	2 20	0 67
2-5 cm	31.55 31.26 29.25 30 25 32.61 29.35	30.71	1.33	0 43
0-5 cm	33 74 31.83 30.45 30 77 32.46 29.90	31 52	1 68	0.53
Wheat	Field#: 2	Date: 5/26/82 (Julian: 146)	Time:	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	30.75 31.52 34.84 32 87 32 12 31.27 32.23	31 47	0 46	
2-5 cm	30.40 31.32 33.79 33 07 30 83 31.33 31.79	31.79	1 34	0.42
0-5 cm	30.54 31.40 34.21 32 99 31.35 31.30 31.96	31.96	1.39	0.43
Wheat	Field#: 2	Date: 6/ 1/82 (Julian: 152)	Time: 15:06	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	30.05 32.81 39.38 42 84 34 15 29.62 34.81	5 28	1 52	
2-5 cm	31.45 33 07 36 74 37 21 34 07 30 42 33 83	3 83	2 75	0.81
0-5 cm	30 89 32 97 37 79 39 46 34.10 30.10 34.22	3 76	1.09	
Wheat	Field#: 2	Date: 6/ 4/82 (Julian: 155)	Time: 14:35	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	27.98 30.42 36 15 41.14 32 88 25.49 32.34	5 69	1 76	
2-5 cm	28 46 27.79 32.92 35.34 31.80 27.91 30 70	3 13	1 02	
0-5 cm	28 27 28.84 34.21 37 66 32.23 26.94	31.36	4 15	1 32

III.a.3-5

Wheat	Field#: 2	Date: 6/14/82 (Julian: 165)	Time: 14:38	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	30.60 33.09 33.90 35.75 34.78 30.96	33.51	2.20	0.66
2-5 cm	30.81 36.35 35.57 33.32 33.05 30.62	33.29	2.36	0.71
0-5 cm	30.72 35.85 34.90 34.29 33.74 30.76	33.38	2.30	0.69
Wheat	Field#: 2	Date: 6/16/82 (Julian: 167)	Time: 09:35	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	32.46 37.60 36.75 40.57 36.73 34 03	36.36	2.83	0.78
2-5 cm	30.60 38 01 36.06 35.65 35.97 33.60	34 98	2 57	0.73
0-5 cm	31.34 37.85 36.34 37.62 36.27 33.77	35.53	2.67	0.75
Wheat	Field#: 2	Date: 6/21/82 (Julian: 172)	Time: 09:50	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	29.57 33.85 35.61 33 62 34.13 30.56	32.89	2 32	0.70
2-5 cm	27.09 36.76 33.93 32.84 31.35 29 60	31.93	3 38	1.06
0-5 cm	28.08 35.59 34.60 33.15 32.47 29.98	32.31	2.96	0.92
Wheat	Field#: 2	Date: 6/25/82 (Julian: 176)	Time: 11:25	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	29.96 31.75 33.45 32 37 34.48 31 72	32.29	1.56	0 48
2-5 cm	27.32 29.32 33.54 31.32 33.35 29.88	30.79	2.42	0.79
0-5 cm	28.37 30.30 33.50 31.74 33.80 30 61	31.39	2.08	0.67
Wheat	Field#: 2	Date: 6/28/82 (Julian: 179)	Time: 14 00	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	30.17 32.18 31.34 36.19 32 20 32.31	32.40	2.03	0 63
2-5 cm	28.26 27 80 30.09 30 50 30 53 31.86	29 84	1 53	0 51
0-5 cm	29.02 29.56 30.59 32 78 31.20 32.04	30.86	1 73	0.56
Wheat	Field#: 2	Date: 7/ 6/82 (Julian: 187)	Time:	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	21.72 28 32 31.92 31.94 20.95 23.26	26.35	5.03	1.91
2-5 cm	22.92 28 67 28.26 30.90 23 23 24.57	26.43	3 30	1.25
0-5 cm	22.44 28.53 29.73 31.31 22 32 24.04	26.40	3 99	1.51
Wheat	Field#: 2	Date: 7/ 7/82 (Julian: 188)	Time: 14:00	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	26.94 28.83 31.00 31.28 28.09 24.37	28.42	2.60	0.91
2-5 cm	25.02 27.28 29.22 30.26 28 96 22.28	27.17	3.02	1.11
0-5 cm	25.79 27 90 29.93 30.67 28.61 23.12	27.67	2.85	1.03
Wheat	Field#: 3	Date: 4/12/82 (Julian: 102)	Time: 15:30	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S D.	S.D./Mean
0-2 cm	16.56 20.30 15.35	17.40	2.58	1.48
2-5 cm	16.56 20.30 15.35	17.40	2.58	1.48
0-5 cm	16.56 20 30 15.35	17.40	2.58	1.48

III a 3-6

Wheat		Field#:	3	Date:	4/16/82 (Julian: 106)	Time: 13:10		
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
0-2 cm	16.59	14.54	9.81					Mean
2-5 cm	16.59	14.54	9.81					S.D.
0-5 cm	16.59	14.54	9.81					S.D./Mean
								3.48
								2.55
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								2.55
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Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4	Date: 6/9/82 (Julian: 160)	Time: 13:54	Mean	S.D.	S.D./Mean
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4	Date: 6/14/82 (Julian: 165)	Time: 15:20	Mean	S.D.	S.D./Mean
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4	Date: 6/16/82 (Julian: 167)	Time: 10:27	Mean	S.D.	S.D./Mean
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4	Date: 6/18/82 (Julian: 169)	Time: 13:24	Mean	S.D.	S.D./Mean
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4	Date: 6/21/82 (Julian: 172)	Time: 09:57	Mean	S.D.	S.D./Mean
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4	Date: 6/23/82 (Julian: 174)	Time: 15:00	Mean	S.D.	S.D./Mean
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4	Date: 6/25/82 (Julian: 176)	Time: 13:00	Mean	S.D.	S.D./Mean
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4	Date: 6/28/82 (Julian: 179)	Time: 14:00	Mean	S.D.	S.D./Mean

III.a.3-9

III.a.3-10

Field#: 4				Date: 5/ 7/82 (Julian: 127)	Time: 14:35		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	16.61	17.59	20.18			18.13	1.85
0-2 cm						18.13	1.02
2-5 cm	16.61	17.59	20.18			18.13	1.85
0-5 cm	16.61	17.59	20.18			18.13	1.02
Field#: 4				Date: 5/10/82 (Julian: 130)	Time: 14:20		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	11.12	9.58	10.97			10.55	0.85
0-2 cm						10.55	0.80
2-5 cm	11.12	9.58	10.97			10.55	0.85
0-5 cm	11.12	9.58	10.97			10.55	0.80
Field#: 4				Date: 5/14/82 (Julian: 134)	Time:		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	19.77	17.97	24.18			20.64	3.20
0-2 cm						20.64	1.55
2-5 cm	19.77	17.97	24.18			20.64	3.20
0-5 cm	19.77	17.97	24.18			20.64	1.55
Field#: 4				Date: 5/17/82 (Julian: 137)	Time: 16:01		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	19.22					19.22	
0-2 cm						19.22	
2-5 cm	19.22					19.22	
0-5 cm	19.22					19.22	
Field#: 4				Date: 5/21/82 (Julian: 141)	Time: 10:25		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	37.06	28.84	29.14	27.20	31.41	25.70	29.89
0-2 cm						4.01	1.34
2-5 cm	32.83	30.12	26.54	24.43	24.39	29.25	27.93
0-5 cm	34.52	29.61	27.58	25.54	27.20	27.83	28.71
Field#: 4				Date: 5/24/82 (Julian: 144)	Time: 10:05		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	37.45	29.65	27.95	25.68	21.53	29.72	28.66
0-2 cm						5.28	1.84
2-5 cm	32.65	28.78	26.83	26.50	28.15	28.36	28.54
0-5 cm	34.57	29.13	27.28	26.17	25.50	28.90	28.59
Field#: 4				Date: 5/28/82 (Julian: 148)	Time:		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	31.96	30.42	26.10	26.29	30.79	36.02	30.26
0-2 cm						3.73	1.23
2-5 cm	29.58	29.45	24.98	25.07	28.59	28.55	27.70
0-5 cm	30.53	29.84	25.43	25.55	29.47	31.54	28.73
Field#: 4				Date: 6/ 4/82 (Julian: 155)	Time: 15:31		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	37.08	44.19		33.24	34.04	31.11	35.93
0-2 cm						5.09	1.42
2-5 cm	30.30	30.60		31.37	29.20	29.52	30.20
0-5 cm	33.01	36.04		32.12	31.14	30.15	32.49

III.a.3-11

Field#: 4				Date: 6/29/82 (Julian: 180)	Time: 13:40		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	33.72	33.61				33.66	0.08
0-2 cm						31.54	0.02
2-5 cm	30.68	32.40				32.39	0.39
0-5 cm	31.89	32.88				32.39	0.76
Field#: 4				Date: 7/ 6/82 (Julian: 187)	Time:		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	39.06	35.58	38.36	38.73		37.93	1.60
0-2 cm						34.84	0.42
2-5 cm	34.51	35.02	32.83	36.99		36.08	1.71
0-5 cm	36.33	35.25	35.05	37.69		36.08	0.46
Field#: 4				Date: 7/ 7/82 (Julian: 188)	Time: 15:15		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	31.72	52.36	42.72	46.70	37.71	33.97	40.86
0-2 cm						7.88	1.93
2-5 cm	35.35	31.49	31.60	33.48	31.92	28.78	32.10
0-5 cm	33.90	39.84	36.05	38.77	34.24	30.85	35.61
Field#: 5				Date: 4/12/82 (Julian: 102)	Time: 15:45		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	9.78	10.72	11.58			10.70	0.90
0-2 cm						10.70	0.84
2-5 cm	9.78	10.72	11.58			10.70	0.90
0-5 cm	9.78	10.72	11.58			10.70	0.84
Field#: 5				Date: 4/16/82 (Julian: 106)	Time: 13:25		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	8.19	7.37	9.46			8.34	1.05
0-2 cm						8.34	1.26
2-5 cm	8.19	7.37	9.46			8.34	1.05
0-5 cm	8.19	7.37	9.46			8.34	1.26
Field#: 5				Date: 4/26/82 (Julian: 116)	Time: 13:20		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	8.64	11.74	11.31			10.56	1.68
0-2 cm						10.56	1.59
2-5 cm	8.64	11.74	11.31			10.56	1.59
0-5 cm	8.64	11.74	11.31			10.56	1.59
Field#: 5				Date: 4/30/82 (Julian: 120)	Time: 14:33		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	16.51	12.46	10.99			13.32	2.86
0-2 cm						13.32	2.14
2-5 cm	16.51	12.46	10.99			13.32	2.86
0-5 cm	16.51	12.46	10.99			13.32	2.14
Field#: 5				Date: 5/ 3/82 (Julian: 123)	Time: 13:55		
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	
Depth	32.89	31.81	30.93			31.88	0.98
0-2 cm						31.88	0.31
2-5 cm	32.89	31.81	30.93			31.88	0.98
0-5 cm	32.89	31.81	30.93			31.88	0.31

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Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 5	Date: 5/7/82 (Julian: 127)	Time: 14:48	S.D.	S.D./Mean
	LOC 1	LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S.D.	S.D./Mean
	17.44	15.86 16.79	16.70	0.79	0.48
	17.44	15.86 16.79	16.70	0.79	0.48
	17.44	15.86 16.79	16.70	0.79	0.48
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 5	Date: 5/10/82 (Julian: 130)	Time:	S.D.	S.D./Mean
	LOC 1	LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S.D.	S.D./Mean
	14.08	10.47 12.97	12.50	1.85	1.48
	14.08	10.47 12.97	12.50	1.85	1.48
	14.08	10.47 12.97	12.50	1.85	1.48
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 5	Date: 5/14/82 (Julian: 134)	Time: 14:40	S.D.	S.D./Mean
	LOC 1	LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S.D.	S.D./Mean
	16.65	16.93 21.79	18.46	2.89	1.56
	16.65	16.93 21.79	18.46	2.89	1.56
	16.65	16.93 21.79	18.46	2.89	1.56
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 5	Date: 5/17/82 (Julian: 137)	Time: 16:19	S.D.	S.D./Mean
	LOC 1	LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S.D.	S.D./Mean
	20.64	17.40	19.02	2.29	1.20
	20.64	17.40	19.02	2.29	1.20
	20.64	17.40	19.02	2.29	1.20
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 5	Date: 5/21/82 (Julian: 141)	Time:	S.D.	S.D./Mean
	LOC 1	LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S.D.	S.D./Mean
	20.78	29.21 33.46 21.78 18.10 17.73	23.51	6.40	2.72
	20.94	29.41 24.61 19.70	23.67	4.36	1.84
	20.88	31.03 23.48 19.06	23.60	5.18	2.19
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 5	Date: 5/24/82 (Julian: 144)	Time: 10:32	S.D.	S.D./Mean
	LOC 1	LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S.D.	S.D./Mean
	23.45	23.98 27.41 21.68 17.09 17.78	21.90	3.93	1.79
	17.54	23.95 26.57 19.97 16.51 15.94	20.08	4.33	2.15
	19.91	23.96 26.91 20.65 16.74 16.68	20.81	4.17	2.01
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 5	Date: 6/1/82 (Julian: 152)	Time: 14:30	S.D.	S.D./Mean
	LOC 1	LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S.D.	S.D./Mean
	23.68	27.04 26.65 23.61 22.33 20.10	23.90	2.62	1.10
	23.21	25.82 25.32 23.49 21.43 20.02	23.22	2.22	0.96
	23.40	26.31 25.86 23.54 21.79 20.05	23.49	2.38	1.01
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 5	Date: 6/2/82 (Julian: 153)	Time: 13:35	S.D.	S.D./Mean
	LOC 1	LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean	S.D.	S.D./Mean
	26.05	28.59 33.22 23.03 21.43 19.62	25.32	5.03	1.99
	25.22	26.75 31.80 21.83 20.18 19.82	24.27	4.61	1.90
	25.56	27.48 32.37 22.31 20.68 19.74	24.69	4.78	1.93

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III a.3-14

Wheat	Field#:	5	Date: 7/ 9/82 (Julian: 190)	Time: 10:37					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.50	19.34	7.13	22.24	13.92	16.43	16.76	5.66	3.38
2-5 cm	20.70	20.82	15.71	22.67	26.98		21.38	4.06	1.90
0-5 cm	21.02	20.23	12.28	22.50	21.76		19.53	4.70	2.49
Wheat	Field#:	5	Date: 7/12/82 (Julian: 193)	Time: 13:20					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.31			27.26	22.77	19.80	23.03	3.11	1.35
2-5 cm	20.70			25.29	20.81	19.56	21.59	2.53	1.17
0-5 cm	21.34			26.08	21.59	19.66	22.17	2.76	1.24
Wheat	Field#:	5	Date: 7/13/82 (Julian: 194)	Time:					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	15.57	16.28	20.19	17.18	18.39	10.12	16.29	3.43	2.11
2-5 cm	17.18	22.65	21.85	21.86	19.89	17.76	20.20	2.31	1.14
0-5 cm	16.54	20.10	21.19	19.99	19.29	14.71	18.64	2.76	1.53
Wheat	Field#:	6	Date: 4/12/82 (Julian: 102)	Time: 16:00					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	10.71	11.39	9.66				10.59	0.87	0.83
2-5 cm	10.71	11.39	9.66				10.59	0.87	0.83
0-5 cm	10.71	11.39	9.66				10.59	0.87	0.83
Wheat	Field#:	6	Date: 4/16/82 (Julian: 106)	Time: 13:30					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6.47	6.74	9.04				7.42	1.41	1.90
2-5 cm	6.47	6.74	9.04				7.42	1.41	1.90
0-5 cm	6.47	6.74	9.04				7.42	1.41	1.90
Wheat	Field#:	6	Date: 4/26/82 (Julian: 116)	Time: 13:25					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	11.74	11.59	12.42				11.92	0.44	0.37
2-5 cm	11.74	11.59	12.42				11.92	0.44	0.37
0-5 cm	11.74	11.59	12.42				11.92	0.44	0.37
Wheat	Field#:	6	Date: 4/30/82 (Julian: 120)	Time: 14:45					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	18.52	16.54	15.24				16.77	1.66	0.99
2-5 cm	18.52	16.54	15.24				16.77	1.66	0.99
0-5 cm	18.52	16.54	15.24				16.77	1.66	0.99
Wheat	Field#:	6	Date: 5/ 3/82 (Julian: 123)	Time: 14:05					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	31.69	33.25	37.57				34.17	3.05	0.89
2-5 cm	31.69	33.25	37.57				34.17	3.05	0.89
0-5 cm	31.69	33.25	37.57				34.17	3.05	0.89

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Wheat	Field#:	6	Date: 5/ 7/82 (Julian: 127)	Time: 15:00					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	23.67	20.69	21.56				21.97	1.53	0.70
2-5 cm	23.67	20.69	21.56				21.97	1.53	0.70
0-5 cm	23.67	20.69	21.56				21.97	1.53	0.70
Wheat	Field#:	6	Date: 5/10/82 (Julian: 130)	Time: 14:30					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13.21	14.80	10.95				12.98	1.93	1.49
2-5 cm	13.21	14.80	10.95				12.98	1.93	1.49
0-5 cm	13.21	14.80	10.95				12.98	1.93	1.49
Wheat	Field#:	6	Date: 5/14/82 (Julian: 134)	Time: 14:55					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	23.92	23.48	24.98				24.13	0.77	0.32
2-5 cm	23.92	23.48	24.98				24.13	0.77	0.32
0-5 cm	23.92	23.48	24.98				24.13	0.77	0.32
Wheat	Field#:	6	Date: 5/17/82 (Julian: 137)	Time: 16:20					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	24.86	22.61					23.74	1.59	0.67
2-5 cm	24.86	22.61					23.74	1.59	0.67
0-5 cm	24.86	22.61					23.74	1.59	0.67
Wheat	Field#:	6	Date: 5/21/82 (Julian: 141)	Time:					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	20.34	25.98	17.77	22.50	21.83	19.68	21.35	2.82	1.32
2-5 cm	25.67	22.54	16.98	16.57	20.33	27.31	21.57	4.43	2.06
0-5 cm	23.54	23.91	17.30	18.94	20.93	24.26	21.48	3.79	1.76
Wheat	Field#:	6	Date: 5/28/82 (Julian: 148)	Time: 16:05					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.58	22.17	21.05	21.83	17.97	17.72	20.39	2.01	0.98
2-5 cm	20.95	17.19	20.43	17.38	18.67	17.95	18.76	1.59	0.85
0-5 cm	21.20	19.18	20.68	19.16	18.39	17.86	19.41	1.76	0.90
Wheat	Field#:	6	Date: 6/ 1/82 (Julian: 152)	Time: 14:11					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	23.55	22.45	24.24	19.61	17.52	25.53	22.15	3.03	1.37
2-5 cm	24.47	24.38	22.85	19.35	17.79	22.82	21.94	2.75	1.25
0-5 cm	24.10	23.61	23.41	19.45	17.68	23.90	22.03	2.86	1.30
Wheat	Field#:	6	Date: 6/ 2/82 (Julian: 153)	Time: 13:55					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.83	23.07	21.85	20.06	20.96	20.73	21.58	1.21	0.56
2-5 cm	21.83	22.69	21.97	19.44	22.36	21.46	21.62	1.15	0.53
0-5 cm	22.23	22.84	21.92	19.69	21.80	21.17	21.61	1.17	0.54

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Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	6	Date:	6/ 7/82 (Julian: 158)	Time: 11:23		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	23.22	23.59	27.37	19.82	20.39	26.86	23.54 3.15 1.34
	23.35	23.32	23.18	21.05	18.39	23.68	22.16 2.08 0.94
	23.30	23.43	24.86	20.56	19.19	24.95	22.71 2.50 1.10
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	6	Date:	6/ 9/82 (Julian: 160)	Time: 15:27		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	23.35	23.45	26.12	21.22	17.44	20.32	21.98 3.00 1.37
	22.49	22.68	23.48	21.02	16.92	21.03	21.27 2.34 1.10
	22.84	22.99	24.54	21.10	17.13	20.74	21.56 2.61 1.21
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	6	Date:	6/16/82 (Julian: 167)	Time: 13:50		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	22.52	22.86	21.42	19.92	15.68	21.28	20.62 2.63 1.28
	21.92	22.13	20.84	18.64	16.15	21.54	20.20 2.35 1.17
	22.16	22.42	21.07	19.15	15.97	21.44	20.37 2.46 1.21
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	6	Date:	6/18/82 (Julian: 169)	Time: 10:53		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	21.58	21.03	19.76	18.20	16.44	18.81	19.30 1.90 0.98
	21.33	21.02	19.44	17.90	16.83	18.41	19.15 1.78 0.93
	21.43	21.03	19.57	18.02	16.67	18.57	19.21 1.83 0.95
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	6	Date:	6/21/82 (Julian: 172)	Time: 14:44		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	22.46	22.97	10.11	17.86	17.33	20.68	18.57 4.74 2.55
	20.94	22.12	21.11	17.91	17.98	23.69	20.63 2.29 1.11
	21.55	22.46	16.71	17.89	17.72	22.48	19.80 3.27 1.69
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	6	Date:	6/25/82 (Julian: 176)	Time: 14:45		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	21.43	20.79	13.36	11.81	9.35	17.60	15.73 4.97 3.16
	20.18	20.65	19.16	16.42	13.12	19.52	18.18 2.88 1.59
	20.68	20.71	16.84	14.58	11.61	18.75	17.20 3.72 2.21
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	6	Date:	6/28/82 (Julian: 179)	Time: 12:15		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	21.94	23.11	17.04		20.52	14.23	19.37 3.67 1.89
	20.46	23.09	23.03		19.63	15.01	20.24 3.31 1.63
	21.05	23.10	20.63		19.99	14.70	19.89 3.45 1.74
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	6	Date:	7/ 6/82 (Julian: 187)	Time: 15:00		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	18.32	25.06	21.67	21.21	7.22	10.16	17.27 7.05 4.08
	22.78	24.44	22.45	19.07	14.65	22.04	20.90 3.53 1.69
	20.99	24.69	22.14	19.92	11.68	17.29	19.45 4.93 2.64

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Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	7	Date:	4/12/82 (Julian: 102)	Time: 16:05		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	10.19	16.87	13.09				13.38 3.35 2.50
	10.19	16.87	13.09				13.38 3.35 2.50
	10.19	16.87	13.09				13.38 3.35 2.50
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	7	Date:	4/16/82 (Julian: 106)	Time: 13:37		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	6.71	8.52	11.20				8.81 2.26 2.56
	6.71	8.52	11.20				8.81 2.26 2.56
	6.71	8.52	11.20				8.81 2.26 2.56
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	7	Date:	4/26/82 (Julian: 116)	Time: 13:35		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	9.19	9.28	7.60				8.69 0.94 1.09
	9.19	9.28	7.60				8.69 0.94 1.09
	9.19	9.28	7.60				8.69 0.94 1.09
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	7	Date:	4/30/82 (Julian: 120)	Time: 15:02		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	16.27	11.18	15.13				14.20 2.67 1.88
	16.27	11.18	15.13				14.20 2.67 1.88
	16.27	11.18	15.13				14.20 2.67 1.88
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	7	Date:	5/ 3/82 (Julian: 123)	Time: 14:27		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	45.97	31.69	30.32				35.99 -8.67 2.41
	45.97	31.69	30.32				35.99 8.67 2.41
	45.97	31.69	30.32				35.99 8.67 2.41
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	7	Date:	5/ 7/82 (Julian: 127)	Time: 15:58		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	27.68	19.13	19.63				22.15 4.80 2.17
	27.68	19.13	19.63				22.15 4.80 2.17
	27.68	19.13	19.63				22.15 4.80 2.17
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	7	Date:	5/10/82 (Julian: 130)	Time: 14:45		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	11.04	13.97	12.80				12.60 1.47 1.17
	11.04	13.97	12.80				12.60 1.47 1.17
	11.04	13.97	12.80				12.60 1.47 1.17
Wheat Depth 0-2 cm 2-5 cm 0-5 cm	Field#:	7	Date:	5/14/82 (Julian: 134)	Time: 14:59		
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	S.D. S.D./Mean
	23.16	27.16	22.88				24.40 2.39 0.98
	23.16	27.16	22.88				24.40 2.39 0.98
	23.16	27.16	22.88				24.40 2.39 0.98

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Wheat	Field#:	7	Date: 5/17/82 (Julian: 137)	Time:	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	23.97	25.75	22.80				24.17	1.49	0.62
2-5 cm	23.97	25.75	22.80				24.17	1.49	0.62
0-5 cm	23.97	25.75	22.80				24.17	1.49	0.62
Wheat	Field#:	7	Date: 5/21/82 (Julian: 141)	Time:	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	26.24	25.26	24.08	24.55	23.24	26.38	24.96	1.24	0.50
2-5 cm	30.94	25.36	23.95	24.03	22.69	25.48	25.41	2.90	1.14
0-5 cm	29.06	25.32	24.00	24.24	22.91	25.84	25.23	2.24	0.88
Wheat	Field#:	7	Date: 5/28/82 (Julian: 148)	Time: 16:08	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	24.79	20.31	12.08	21.78	22.25	26.00	21.20	4.92	2.32
2-5 cm	23.32	19.68	22.08	21.75	21.94	24.30	22.18	1.57	0.71
0-5 cm	23.91	19.93	18.08	21.76	22.07	24.98	21.79	2.91	1.35
Wheat	Field#:	7	Date: 6/1/82 (Julian: 152)	Time: 14:14	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	25.13	22.36	24.87	22.15	25.00	25.73	24.21	1.54	0.64
2-5 cm	23.85	23.41	24.67	23.31	20.39	25.31	23.49	1.70	0.72
0-5 cm	24.36	22.99	24.75	22.85	22.24	25.48	23.78	1.64	0.69
Wheat	Field#:	7	Date: 6/7/82 (Julian: 158)	Time: 11:25	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	24.53	27.81	26.80	24.92	24.33	27.51	25.98	1.57	0.60
2-5 cm	22.69	25.02	26.13	24.14	25.32	26.56	24.98	1.40	0.56
0-5 cm	23.43	26.14	26.39	24.45	24.92	26.94	25.38	1.47	0.58
Wheat	Field#:	7	Date: 6/9/82 (Julian: 160)	Time: 15:30	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	26.88	26.58	24.49	26.66	26.15	27.41	26.36	1.01	0.38
2-5 cm	25.79	23.77	24.97	25.46	26.17	25.39	25.26	0.83	0.33
0-5 cm	26.23	24.90	24.77	25.94	26.16	26.19	25.70	0.90	0.35
Wheat	Field#:	7	Date: 6/16/82 (Julian: 167)	Time: 13:48	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	26.70	22.82	27.05	10.19	22.27	23.54	22.09	6.17	2.79
2-5 cm	24.93	22.52	23.55	9.48	22.40	24.39	21.21	5.83	2.75
0-5 cm	25.63	22.64	24.95	9.76	22.35	24.05	21.56	5.97	2.77
Wheat	Field#:	7	Date: 6/18/82 (Julian: 169)	Time: 10:55	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	23.98	23.44	28.67	21.16	22.70	28.63	24.76	3.15	1.27
2-5 cm	24.73	22.79	20.01	20.05		24.93	22.50	2.41	1.07
0-5 cm	24.43	23.05	23.47	20.49		26.41	23.41	2.71	1.15

III.a 3-19

Wheat	Field#:	7	Date:	6/21/82 (Julian: 172)	Time: 14:45		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	20.46	15.93	20.80	9.12	12.56	20.72	16.60 4.94 2.98
2-5 cm	20.84	17.40	20.28	15.31	19.20	22.30	19.22 2.52 1.31
0-5 cm	20.69	16.82	20.49	12.84	16.54	21.67	18.17 3.49 1.98
Wheat	Field#:	7	Date:	6/25/82 (Julian: 176)	Time: 14:47		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	18.66	17.80	16.99	20.85	21.92	20.78	19.50 1.96 1.00
2-5 cm	19.54	18.99	16.90	24.43	22.23	20.65	20.46 2.63 1.29
0-5 cm	19.19	18.51	16.94	23.00	22.10	20.70	20.07 2.36 1.17
Wheat	Field#:	7	Date:	6/28/82 (Julian: 179)	Time: 12:13		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	20.70	21.93	19.56	21.91	18.44	23.02	20.93 1.70 0.81
2-5 cm	20.60	18.65	20.35	20.12	19.90	23.02	20.44 1.43 0.70
0-5 cm	20.64	19.96	20.03	20.83	19.31	23.02	20.63 1.54 0.75
Wheat	Field#:	8	Date:	4/12/82 (Julian: 102)	Time: 16:15		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	12.04	11.59	11.98				11.87 0.25 0.21
2-5 cm	12.04	11.59	11.98				11.87 0.25 0.21
0-5 cm	12.04	11.59	11.98				11.87 0.25 0.21
Wheat	Field#:	8	Date:	4/16/82 (Julian: 106)	Time: 13:45		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	15.73	5.07	6.36				9.05 5.82 6.43
2-5 cm	15.73	5.07	6.36				9.05 5.82 6.43
0-5 cm	15.73	5.07	6.36				9.05 5.82 6.43
Wheat	Field#:	8	Date:	4/26/82 (Julian: 116)	Time: 13:40		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	10.17	10.63	10.14				10.31 0.28 0.27
2-5 cm	10.17	10.63	10.14				10.31 0.28 0.27
0-5 cm	10.17	10.63	10.14				10.31 0.28 0.27
Wheat	Field#:	8	Date:	4/30/82 (Julian: 120)	Time: 13:25		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	17.87	19.96	20.45				19.43 1.37 0.71
2-5 cm	17.87	19.96	20.45				19.43 1.37 0.71
0-5 cm	17.87	19.96	20.45				19.43 1.37 0.71
Wheat	Field#:	8	Date:	5/3/82 (Julian: 123)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	36.79						36.79
2-5 cm	36.79						36.79
0-5 cm	36.79						36.79

III.a 3-20

Field#: 8		Date: 5/ 7/82 (Julian: 127)						Time: 16:23	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	22.21	21.84	22.37				22.14	0.27	0.12
2-5 cm	22.21	21.84	22.37				22.14	0.27	0.12
0-5 cm	22.21	21.84	22.37				22.14	0.27	0.12
Field#: 8		Date: 5/10/82 (Julian: 130)						Time: 14:50	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	16.77	14.79	20.16				17.24	2.71	1.57
2-5 cm	16.77	14.79	20.16				17.24	2.71	1.57
0-5 cm	16.77	14.79	20.16				17.24	2.71	1.57
Field#: 8		Date: 5/14/82 (Julian: 134)						Time: 15:10	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	24.77	25.45	24.30				24.84	0.58	0.23
2-5 cm	24.77	25.45	24.30				24.84	0.58	0.23
0-5 cm	24.77	25.45	24.30				24.84	0.58	0.23
Field#: 8		Date: 5/21/82 (Julian: 141)						Time: 10:28	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	26.37	28.34	21.83	22.47	26.68	27.59	25.55	2.73	1.07
2-5 cm	25.17	26.85	22.93	23.13	31.00	26.84	25.99	3.00	1.15
0-5 cm	25.65	27.45	22.49	22.86	29.28	27.14	25.81	2.89	1.12
Field#: 8		Date: 5/24/82 (Julian: 144)						Time:	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	22.10	26.27	19.12	22.77	27.31	21.70	23.21	3.05	1.32
2-5 cm	21.43	24.86	18.13	22.77	25.78	21.49	22.41	2.74	1.22
0-5 cm	21.70	25.42	18.53	22.77	26.39	21.57	22.73	2.87	1.26
Field#: 8		Date: 5/28/82 (Julian: 148)						Time:	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	24.22	26.88	24.87	25.62	28.70		26.06	1.78	0.68
2-5 cm	24.82	27.15	24.64	25.24	29.32		26.23	1.99	0.76
0-5 cm	24.58	27.04	24.73	25.39	29.07		26.16	1.91	0.73
Field#: 8		Date: 6/ 1/82 (Julian: 152)						Time: 13:26	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	28.88	29.22	29.93	28.98	29.12	28.67	29.13	0.44	0.15
2-5 cm	27.44	29.12	27.66	28.30	28.29	27.47	28.05	0.65	0.23
0-5 cm	28.01	29.16	28.57	28.57	28.62	27.95	28.48	0.57	0.20
Field#: 8		Date: 6/ 2/82 (Julian: 153)						Time: 12:50	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	27.05	27.81	27.74	29.73	29.67	28.14	28.36	1.10	0.39
2-5 cm	27.02	28.53	27.64	28.46	29.73	27.95	28.22	0.92	0.33
0-5 cm	27.04	28.24	27.68	28.97	29.71	28.02	28.28	0.99	0.35

III.a.3-21

Field#: 8		Date: 6/ 4/82 (Julian: 155)						Time: 14:31	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean <td>S.D.<th>S.D./Mean</th></td>	S.D. <th>S.D./Mean</th>	S.D./Mean
0-2 cm	27.43	30.38	27.67	28.14	31.51	28.05	28.86	1.67	0.58
2-5 cm	26.99	29.18	27.45	27.62	31.51	27.62	28.40	1.70	0.60
0-5 cm	27.17	29.66	27.54	27.83	31.51	27.79	28.58	1.69	0.59
Field#: 8		Date: 6/ 7/82 (Julian: 158)						Time: 10:24	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	28.98	29.92	28.20	29.49	29.81	28.40	29.13	0.73	0.25
2-5 cm	27.45	29.15	28.50	28.54	30.21	24.06	27.98	2.12	0.76
0-5 cm	28.06	29.46	28.38	28.92	30.05	25.80	28.44	1.57	0.56
Field#: 8		Date: 6/ 9/82 (Julian: 160)						Time:	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	29.38	24.92	28.06	28.94	30.51	27.47	28.21	1.93	0.68
2-5 cm	28.41	27.70	29.37	29.39	28.99	27.76	28.60	0.76	0.27
0-5 cm	28.80	26.59	28.84	29.21	29.60	27.65	28.45	1.23	0.43
Field#: 8		Date: 6/14/82 (Julian: 165)						Time: 16:03	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	27.08	29.16	27.84	29.48	29.24	28.38	28.53	0.94	0.33
2-5 cm	27.15	28.01	27.61	29.11	29.01	32.40	28.88	1.89	0.65
0-5 cm	27.12	28.47	27.70	29.26	29.10	30.79	28.74	1.51	0.52
Field#: 8		Date: 6/16/82 (Julian: 167)						Time:	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	27.66	28.02	31.59	27.42	29.91	26.75	28.56	1.83	0.64
2-5 cm	27.09	31.27	27.92	27.35	28.57	22.32	27.42	2.91	1.06
0-5 cm	27.32	29.97	29.39	27.38	29.10	24.09	27.88	2.48	0.89
Field#: 8		Date: 6/18/82 (Julian: 169)						Time: 10:00	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	27.05	28.08	29.08	28.84	29.21	26.81	28.18	1.05	0.37
2-5 cm	26.61	26.54	28.07	28.05	27.06	26.79	27.19	0.70	0.26
0-5 cm	26.79	27.15	28.48	28.37	27.92	26.80	27.58	0.84	0.30
Field#: 8		Date: 6/21/82 (Julian: 172)						Time: 13:48	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	25.02	26.78	24.44	26.19	30.06	25.68	26.36	1.99	0.76
2-5 cm	25.52	25.37	24.73	25.90	27.39	23.91	25.47	1.17	0.46
0-5 cm	25.32	25.94	24.61	26.02	28.46	24.62	25.83	1.50	0.58
Field#: 8		Date: 6/25/82 (Julian: 176)						Time: 13:38	
Wheat	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D.</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean
0-2 cm	26.30	26.67	27.03	26.89	30.83	25.78	27.25	1.81	0.66
2-5 cm	25.89	26.89	26.43	26.56	29.72	24.86	26.72	1.63	0.61
0-5 cm	26.05	26.80	26.67	26.69	30.16	25.23	26.93	1.70	0.63

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Wheat	Depth	Field#:		Date:		2/82 (Julian: 153)		Time: 15:20		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	42.54	46.72	47.18	44.86	43.22	36.99	43.59	3.72	0.85		
2-5 cm	38.04	41.68	42.30	44.30	40.44	35.11	40.31	3.28	0.81		
0-5 cm	39.84	43.69	44.25	44.52	41.55	35.86	41.62	3.46	0.83		
Wheat	Depth	Field#:		Date:		7/82 (Julian: 158)		Time: 14:24		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	51.25	55.02	61.14	63.22	61.03	53.54	57.53	4.88	0.85		
2-5 cm	54.53	57.73	60.37	63.93	57.23	51.62	57.57	4.31	0.75		
0-5 cm	53.22	56.65	60.68	63.65	58.75	52.39	57.56	4.54	0.79		
Wheat	Depth	Field#:		Date:		6/14/82 (Julian: 165)		Time: 10:36		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	41.47	43.72	38.87	46.08	44.07	38.94	42.19	2.93	0.70		
2-5 cm	41.09	35.06	35.35	37.86	37.35	24.51	35.20	5.67	1.61		
0-5 cm	41.24	38.52	36.76	41.15	40.03	30.28	38.00	4.58	1.24		
Wheat	Depth	Field#:		Date:		6/16/82 (Julian: 167)		Time: 15:06		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	43.67	53.35	43.60	58.16	45.07	38.55	47.07	7.25	1.54		
2-5 cm	43.11	47.24	41.11	45.91	40.42	36.74	42.42	3.84	0.91		
0-5 cm	43.33	49.68	42.11	50.81	42.28	37.46	44.28	5.21	1.16		
Wheat	Depth	Field#:		Date:		6/21/82 (Julian: 172)		Time: 11:15		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	42.27	44.21	34.07	43.51	41.61	37.02	40.45	4.02	0.99		
2-5 cm	24.47	36.29	40.16	38.17	37.97	35.33	35.40	5.61	1.58		
0-5 cm	31.59	39.46	37.73	40.30	39.43	36.01	37.42	4.97	1.35		
Wheat	Depth	Field#:		Date:		6/25/82 (Julian: 176)		Time: 10:10		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	37.87	44.59	37.18	43.59	43.61	38.67	40.92	3.35	0.82		
2-5 cm	45.45	35.59	42.94	45.20	45.02	34.58	41.46	5.03	1.21		
0-5 cm	42.42	39.19	40.64	44.55	44.46	36.21	41.25	4.36	1.06		
Wheat	Depth	Field#:		Date:		6/28/82 (Julian: 179)		Time: 15:06		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	39.01	49.62	32.47		53.55	44.34	43.80	8.38	1.91		
2-5 cm	36.08	39.36	46.38	40.76	40.29	40.72	40.60	3.33	0.82		
0-5 cm	37.25	43.47	40.82		45.59	42.17	41.88	5.35	1.26		
Wheat	Depth	Field#:		Date:		7/2/82 (Julian: 183)		Time: 10:35		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	40.91	24.11	34.03	23.47	38.32	38.59	33.24	7.65	2.30		
2-5 cm	30.56	27.30	33.94	35.45	31.76	30.28	31.55	2.89	0.91		
0-5 cm	34.70	26.03	33.98	30.66	34.38	33.60	32.22	4.79	1.47		

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Wheat	Depth	Field#:		Date:		7/7/82 (Julian: 188)		Time: 10:40		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	6.65	6.72	7.99	8.31	6.66	7.60	7.32	0.74	1.02		
2-5 cm	20.51	22.54	23.65	22.58	22.31	17.31	21.48	2.28	1.06		
0-5 cm	14.96	16.21	17.39	16.87	16.05	13.43	15.82	1.67	1.04		
Wheat	Depth	Field#:		Date:		7/9/82 (Julian: 190)		Time: 15:21		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	7.79	8.32	9.38	9.42	10.10	8.31	8.89	0.88	0.99		
2-5 cm	15.69	19.57	17.75			16.67	17.42	1.66	0.95		
0-5 cm	12.53	15.07	14.40			13.32	14.01	1.35	0.97		
Wheat	Depth	Field#:		Date:		7/13/82 (Julian: 194)		Time: 15:27		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	17.81	20.24	20.80	19.01	20.28	27.44	20.93	3.37	1.61		
2-5 cm	27.01	32.47	34.00	33.12	35.06	30.40	32.01	2.91	0.91		
0-5 cm	23.33	27.58	28.72	27.48	29.15	29.22	27.58	3.09	1.19		
Wheat	Depth	Field#:		Date:		7/15/82 (Julian: 196)		Time:		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	26.20	13.29	14.08	26.30	14.18	14.50	18.09	6.33	3.50		
2-5 cm	31.60	32.57	32.06	27.82	30.89	28.43	30.56	1.98	0.65		
0-5 cm	29.44	24.86	24.87	27.21	24.20	22.86	25.57	3.72	1.79		
Wheat	Depth	Field#:		Date:		4/12/82 (Julian: 102)		Time: 16:50		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	6.74	8.03	7.62					7.46	0.66	0.88	
2-5 cm	6.74	8.03	7.62					7.46	0.66	0.88	
0-5 cm	6.74	8.03	7.62					7.46	0.66	0.88	
Wheat	Depth	Field#:		Date:		4/16/82 (Julian: 106)		Time: 14:35		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	6.48	4.76	5.70					5.64	0.86	1.53	
2-5 cm	6.48	4.76	5.70					5.64	0.86	1.53	
0-5 cm	6.48	4.76	5.70					5.64	0.86	1.53	
Wheat	Depth	Field#:		Date:		4/26/82 (Julian: 116)		Time: 14:20		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	7.86	8.51	5.46					7.28	1.61	2.21	
2-5 cm	7.86	8.51	5.46					7.28	1.61	2.21	
0-5 cm	7.86	8.51	5.46					7.28	1.61	2.21	
Wheat	Depth	Field#:		Date:		4/30/82 (Julian: 120)		Time: 15:45		S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	11.62	12.26	14.16					12.68	1.32	1.04	
2-5 cm	11.62	12.26	14.16					12.68	1.32	1.04	
0-5 cm	11.62	12.26	14.16					12.68	1.32	1.04	

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Wheat	Field#:10	Date:	5/10/82 (Julian: 130)	Time: 15:40	S D	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	10.53 9.40			9.97	0.80	0.80
2-5 cm	10.53 9.40			9.97	0.80	0.80
0-5 cm	10.53 9.40			9.97	0.80	0.80
Wheat	Field#:10	Date:	5/14/82 (Julian: 134)	Time: 16:08	S D	S D /Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	18.34 17.25 17.82			17.80	0.55	0.31
2-5 cm	18.34 17.25 17.82			17.80	0.55	0.31
0-5 cm	18.34 17.25 17.82			17.80	0.55	0.31
Wheat	Field#:10	Date:	5/26/82 (Julian: 146)	Time: 09:43	S D	S D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	19.84 20.53 20.72 19.74 18.98 19.56			19.89	0.64	0.32
2-5 cm	20.33 21.12 20.20 19.45 19.08 18.66			19.81	0.91	0.46
0-5 cm	20.13 20.88 20.41 19.57 19.04 19.02			19.84	0.80	0.40
Wheat	Field# 10	Date:	6/ 1/82 (Julian: 152)	Time: 10:50	S D	S D /Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	18.79 21.42 19.94 20.87 19.48 18.92			19.90	1.06	0.53
2-5 cm	18.68 20.69 18.90 18.16 19.86 18.26			19.09	0.99	0.52
0-5 cm	18.73 20.98 19.32 19.24 19.71 18.52			19.42	1.02	0.52
Wheat	Field#:10	Date:	6/ 4/82 (Julian: 155)	Time: 10:52	S.D.	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	17.76 19.79 19.58 18.89 17.85 19.05			18.82	0.85	0.45
2-5 cm	20.24 19.88 19.66 17.75 17.20 17.12			18.64	1.43	0.77
0-5 cm	19.25 19.84 19.63 18.20 17.46 17.89			18.71	1.20	0.64
Wheat	Field#:10	Date:	6/ 7/82 (Julian: 158)	Time: 12:05	S D	S D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	18.90 19.75 20.11 18.50 19.68 20.29			19.54	0.70	0.36
2-5 cm	18.37 19.18 19.98 18.76 18.92 19.66			19.15	0.59	0.31
0-5 cm	18.59 19.41 20.03 18.66 19.22 19.91			19.30	0.63	0.33
Wheat	Field#:10	Date:	6/ 9/82 (Julian: 160)	Time: 13:17	S.D	S D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	20.17 20.28 22.70 21.51 20.42 20.56			20.94	0.99	0.47
2-5 cm	19.82 20.07 22.76 21.16 20.41 20.04			20.71	1.11	0.54
0-5 cm	19.96 20.16 22.74 21.30 20.42 20.25			20.80	1.06	0.51
Wheat	Field#:10	Date:	6/14/82 (Julian: 165)	Time: 10:10	S.D.	S D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	15.75 18.00 17.17 18.06 14.83 15.28			16.52	1.41	0.85
2-5 cm	14.95 16.53 16.64 16.05 14.38 14.45			15.50	1.03	0.67
0-5 cm	15.27 17.12 16.86 16.86 14.56 14.78			15.91	1.18	0.74

III.a 3-27

Wheat	Field#:10	Date:	6/16/82 (Julian: 167)	Time: 15:00	S.D.	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	18.44 18.27 19.56 18.03 16.82 17.64			18.13	0.91	0.50
2-5 cm	18.55 18.37 19.14 17.82 17.29 17.47			18.11	0.71	0.39
0-5 cm	18.51 18.33 19.31 17.91 17.10 17.54			18.12	0.79	0.43
Wheat	Field#:10	Date:	6/18/82 (Julian: 169)	Time: 14:06	S.D.	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	17.88 19.37 20.50 18.35 17.13 17.64			18.48	1.25	0.67
2-5 cm	18.05 19.03 19.63 18.43 17.23 17.29			18.28	0.95	0.52
0-5 cm	17.98 19.17 19.98 18.39 17.19 17.43			18.36	1.07	0.58
Wheat	Field#:10	Date:	6/21/82 (Julian: 172)	Time:	S.D	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	16.26 18.70 17.58 16.61 16.28 15.02			16.74	1.26	0.76
2-5 cm	15.13 18.18 17.24 15.87 15.41 14.68			16.08	1.35	0.84
0-5 cm	15.58 18.39 17.38 16.17 15.76 14.82			16.35	1.32	0.81
Wheat	Field#:10	Date:	6/25/82 (Julian: 176)	Time: 09:30	S.D.	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	16.84 18.38 18.00 16.04 16.99 16.26			17.09	0.93	0.55
2-5 cm	16.36 18.01 17.90 16.16			15.92	1.01	0.60
0-5 cm	16.55 18.16 17.94 16.11			16.05	1.06	0.58
Wheat	Field#:10	Date:	6/28/82 (Julian: 179)	Time: 15:40	S.D	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	15.59 18.13 17.70 15.14 14.26 14.20			15.83	1.70	1.07
2-5 cm	15.84 18.02 17.10 15.42 14.22 14.24			15.81	1.53	0.97
0-5 cm	15.74 18.06 17.34 15.31 14.23 14.22			15.82	1.60	1.01
Wheat	Field#:10	Date:	7/ 2/82 (Julian: 183)	Time: 10:12	S.D.	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	15.05 16.96 17.47 15.50 14.63 14.98			15.76	1.17	0.74
2-5 cm	15.09 16.60 16.49 15.03 14.70 14.41			15.39	0.93	0.60
0-5 cm	15.08 16.74 16.88 15.22 14.67 14.64			15.54	1.02	0.66
Wheat	Field#:10	Date:	7/ 7/82 (Julian: 188)	Time: 11:10	S.D	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	6.01 11.69 11.38 5.52 8.34 4.45			7.90	3.09	3.92
2-5 cm	8.74 12.16 10.93 7.06 8.36 7.34			9.10	2.03	2.23
0-5 cm	7.65 11.97 11.11 6.44 8.35 6.18			8.62	2.46	2.91
Wheat	Field#:10	Date:	7/ 9/82 (Julian: 190)	Time: 15:30	S.D.	S.D./Mean
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6			Mean		
0-2 cm	3.75 4.63 5.91 5.16 4.16 4.09			4.62	0.80	1.74
2-5 cm	7.65 8.71 8.70 7.82 4.70 5.74			7.22	1.64	2.28
0-5 cm	6.09 7.08 7.58 6.76 4.48 5.08			6.18	1.31	2.06

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Wheat	Field#:10 Date: 7/12/82 (Julian: 193) Time:								
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13.63	13.63	15.15	13.76	14.20	11.24	13.60	1.29	0.95
2-5 cm	13.99	13.87	16.30	13.83	12.30	12.54	13.81	1.42	1.03
0-5 cm	13.85	13.78	15.84	13.80	13.06	12.02	13.72	1.37	1.00

Wheat	Field#:10 Date: 7/13/82 (Julian: 194) Time: 15:10								
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17.59		18.38	15.49	15.38	16.16	16.60	1.33	0.80
2-5 cm	17.17	17.62	18.53	15.99	15.33	16.13	16.79	1.19	0.71
0-5 cm	17.34		18.47	15.79	15.35	16.14	16.72	1.24	0.74

APPENDIX III.b
GROUND-TRUTH DATA - CORN

1. Corn Vegetation Data
2. Plant Density Data
3. Soil Moisture Data

Notes on Corn Vegetation Data:

1. Wet- and dry-biomass density values for cobs are in kg/m². Other density values are in kg/m³.
2. Values for leaves for each plant part have been calculated using leaf-layer thickness. For determination of leaf-layer thickness, see Figure 8.
3. Values for stalks, each whole layer, and the whole plant have been calculated using the height of the plant part and the mean canopy height as explained in Section 6.1.3.
4. Abbreviations Used for Plant Parts:

L1L	-	Layer 1 leaves	L3L	-	Layer 3 leaves
L1S	-	Layer 1 stalks	L3S	-	Layer 3 stalks
Top $\frac{1}{3}$	-	Layer 1 all parts	L3C	-	Layer 3 cobs
			Low $\frac{1}{3}$	-	Layer 3 all parts
L2L	-	Layer 2 leaves			
L2S	-	Layer 2 stalks	L123L	-	All leaves
L2C	-	Layer 2 cobs	L123S	-	All stalks
Mid $\frac{1}{3}$	-	Layer 2 all parts	Cobs	-	All cobs
			L123C	-	All stalks and cobs
			Whole	-	Whole plant

Corn Field # 1	Date: 5/19/82 (Julian: 139)	Time: 11:30	Mean Canopy Height: 21.67 cm				
Top Leaf Height:	21.67 cm	Top Cob Height:		cm	Leaf Layer Depth:	21.67 cm	
Plant Parts:	L1L L1S TOP1/3 L2L	L2S L2C MID1/3 L3L L3S L3C LOW1/3	L123L L123S COBS L123SC WHOLE				
% Plant Moisture:							0.09
Wet Biomass Density:							
Dry Biomass Density:							
Plant Water Density:							
Corn Field # 1	Date: 5/21/82 (Julian: 141)	Time: 14:18	Mean Canopy Height: 32.00 cm				
Top Leaf Height:	32.00 cm	Top Cob Height:		cm	Leaf Layer Depth:	32.00 cm	
Plant Parts:	L1L L1S TOP1/3 L2L	L2S L2C MID1/3 L3L L3S L3C LOW1/3	L123L L123S COBS L123SC WHOLE				
% Plant Moisture:							0.13
Wet Biomass Density:							
Dry Biomass Density:							
Plant Water Density:							
Corn Field # 1	Date: 5/24/82 (Julian: 144)	Time: 12:00	Mean Canopy Height: 26.50 cm				
Top Leaf Height:	26.00 cm	Top Cob Height:		cm	Leaf Layer Depth:	26.00 cm	
Plant Parts:	L1L L1S TOP1/3 L2L	L2S L2C MID1/3 L3L L3S L3C LOW1/3	L123L L123S COBS L123SC WHOLE				
% Plant Moisture:							
Wet Biomass Density:							
Dry Biomass Density:							
Plant Water Density:							
Corn Field # 1	Date: 5/26/82 (Julian: 146)	Time: 14:00	Mean Canopy Height: 27.83 cm				
Top Leaf Height:	27.83 cm	Top Cob Height:		cm	Leaf Layer Depth:	27.83 cm	
Plant Parts:	L1L L1S TOP1/3 L2L	L2S L2C MID1/3 L3L L3S L3C LOW1/3	L123L L123S COBS L123SC WHOLE				
% Plant Moisture:							0.41
Wet Biomass Density:							
Dry Biomass Density:							
Plant Water Density:							
Corn Field # 1	Date: 6/ 2/82 (Julian: 153)	Time: 12:00	Mean Canopy Height: 41.50 cm				
Top Leaf Height:	41.50 cm	Top Cob Height:		cm	Leaf Layer Depth:	41.50 cm	
Plant Parts:	L1L L1S TOP1/3 L2L	L2S L2C MID1/3 L3L L3S L3C LOW1/3	L123L L123S COBS L123SC WHOLE				
% Plant Moisture:							0.42
Wet Biomass Density:							
Dry Biomass Density:							
Plant Water Density:							
Corn Field # 1	Date: 6/ 4/82 (Julian: 155)	Time: 11:46	Mean Canopy Height: 42.33 cm				
Top Leaf Height:	42.33 cm	Top Cob Height:		cm	Leaf Layer Depth:	42.33 cm	
Plant Parts:	L1L L1S TOP1/3 L2L	L2S L2C MID1/3 L3L L3S L3C LOW1/3	L123L L123S COBS L123SC WHOLE				
% Plant Moisture:							0.74
Wet Biomass Density:							
Dry Biomass Density:							
Plant Water Density:							
Corn Field # 1	Date: 6/14/82 (Julian: 165)	Time: 15:00	Mean Canopy Height: 55.33 cm				
Top Leaf Height:	55.00 cm	Top Cob Height:		cm	Leaf Layer Depth:	55.00 cm	
Plant Parts:	L1L L1S TOP1/3 L2L	L2S L2C MID1/3 L3L L3S L3C LOW1/3	L123L L123S COBS L123SC WHOLE				
% Plant Moisture:							
Wet Biomass Density:							
Dry Biomass Density:							
Plant Water Density:							

Corn Field # 1 Date: 7/12/82 (Julian: 193) Time: 10:12 Mean Canopy Height: 253.83 cm
 Top Leaf Height: 215.83 cm Top Cob Height: 119.67 cm Bottom Green Leaf Height: 51.00 cm Leaf Layer Depth: 164.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOM1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 75.03 81.24 78.43 94.27 87.43 92.54 90.30 83.92 83.86 91.94 84.94 87.55 84.88 92.25 86.10 86.45
 Wet Biomass Density: 0.56 0.37 0.68 0.77 1.35 0.32 2.50 0.91 2.05 0.31 2.78 0.74 1.26 0.63 1.51 1.99
 Dry Biomass Density: 0.14 0.07 0.15 0.04 0.17 0.02 0.24 0.15 0.33 0.03 0.42 0.09 0.19 0.05 0.21 0.27
 Plant Water Density: 0.42 0.30 0.53 0.72 1.18 2.26 0.77 1.72 2.36 0.65 1.07 1.30 1.72

Corn Field # 1 Date: 7/13/82 (Julian: 194) Time: : Mean Canopy Height: 251.00 cm
 Top Leaf Height: 219.17 cm Top Cob Height: 126.00 cm Bottom Green Leaf Height: 26.33 cm Leaf Layer Depth: 192.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOM1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.41 0.30 0.56 0.51 1.35 0.40 2.33 0.96 2.32 0.36 3.41 0.62 1.32 0.76 1.63 2.10
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 7/15/82 (Julian: 196) Time: 12:30 Mean Canopy Height: 276.67 cm
 Top Leaf Height: 242.50 cm Top Cob Height: 140.67 cm Bottom Green Leaf Height: 29.67 cm Leaf Layer Depth: 212.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOM1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 81.72 82.13 81.94 85.39 91.19 87.86 89.74 93.62 90.12 88.10 92.27 89.23
 Wet Biomass Density: 0.31 0.22 0.41 0.56 1.06 0.73 2.41 0.82 2.57 0.59 3.77 0.57 1.28 1.32 1.76 2.20
 Dry Biomass Density: 0.06 0.04 0.07 0.16 0.06 0.10 0.26 0.04 0.37 0.15 0.10 0.19
 Plant Water Density: 0.25 0.18 0.34 0.91 0.72 2.31 1.13 1.57

Corn Field # 1 Date: 7/19/82 (Julian: 200) Time: 10:00 Mean Canopy Height: 268.67 cm
 Top Leaf Height: 238.50 cm Top Cob Height: 141.83 cm Bottom Green Leaf Height: 27.50 cm Leaf Layer Depth: 211.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOM1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.19 0.15 0.27 0.50 0.82 0.82 2.23 0.52 1.52 0.46 2.40 0.42 0.83 1.28 1.30 1.63
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 7/23/82 (Julian: 204) Time: 13:30 Mean Canopy Height: 264.83 cm
 Top Leaf Height: 232.33 cm Top Cob Height: 123.67 cm Bottom Green Leaf Height: 23.17 cm Leaf Layer Depth: 209.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOM1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.25 0.16 0.31 0.78 0.74 1.65 3.39 0.43 1.84 0.51 2.74 0.53 0.91 2.16 1.73 2.15
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 7/26/82 (Julian: 207) Time: 14:20 Mean Canopy Height: 262.83 cm
 Top Leaf Height: 242.33 cm Top Cob Height: 142.50 cm Bottom Green Leaf Height: 37.00 cm Leaf Layer Depth: 205.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOM1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.19 0.15 0.30 0.55 0.86 1.92 3.60 0.92 2.11 0.33 3.02 0.53 1.04 2.25 1.90 2.31
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 7/28/82 (Julian: 209) Time: 14:14 Mean Canopy Height: 283.00 cm
 Top Leaf Height: 244.17 cm Top Cob Height: 133.50 cm Bottom Green Leaf Height: 22.00 cm Leaf Layer Depth: 222.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOM1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.28 0.14 0.31 0.59 0.79 1.89 3.38 0.30 1.59 0.22 2.06 0.42 0.84 2.11 1.59 1.92
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 6/16/82 (Julian: 167) Time: 09:15 Mean Canopy Height: 59.33 cm
Top Leaf Height: 59.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 59.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.90 0. 0.88 0.58 0.41 0. 0.99 0. 1.37 0. 0.49 0.59 0. 0.59 1.08
Dry Biomass Density:
Plant Water Density:

Corn Field # 1 Date: 6/21/82 (Julian: 172) Time: 09:40 Mean Canopy Height: 82.83 cm
Top Leaf Height: 82.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 82.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.70 0. 80.70 84.49 90.48 0. 87.27 84.47 0. 2.17 0.42 0.80 0. 0.80 1.22
Dry Biomass Density: 0.19 0. 0.18 0.70 0.60 0. 1.30 0.38 1.79 0. 0.07 0.07 0. 0.36
Plant Water Density: 0.04 0. 0.03 0.11 0.06 0. 0.17 0.06 0. 0.36

Corn Field # 1 Date: 6/25/82 (Julian: 176) Time: 11:20 Mean Canopy Height: 98.50 cm
Top Leaf Height: 98.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 98.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.69 0. 0.68 0.58 0.91 0. 1.50 0.34 2.05 0. 2.39 0.54 0.99 0. 0.99 1.52
Dry Biomass Density:
Plant Water Density:

Corn Field # 1 Date: 6/28/82 (Julian: 179) Time: 15:25 Mean Canopy Height: 130.50 cm
Top Leaf Height: 130.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 130.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.70 0. 0.69 0.43 1.38 0. 1.81 0.44 2.36 0. 2.80 0.52 1.25 0. 1.25 1.77
Dry Biomass Density:
Plant Water Density:

Corn Field # 1 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 141.17 cm
Top Leaf Height: 138.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 138.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Corn Field # 1 Date: 7/ 6/82 (Julian: 187) Time: 11:10 Mean Canopy Height: 177.17 cm
Top Leaf Height: 177.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 177.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 79.77 94.31 82.20 82.47 92.67 0. 89.04 82.72 91.57 0. 90.03 82.06-91.99 0. 91.99 89.15
Dry Biomass Density: 0.25 0.05 0.30 0.63 1.14 0. 1.77 0.45 2.13 0. 2.58 0.44 1.11 0. 1.11 1.55
Plant Water Density: 0.05 0.00 0.05 0.11 0.08 0. 0.19 0.08 0.18 0. 0.26 0.08 0.09 0. 0.09 0.17

Corn Field # 1 Date: 7/ 7/82 (Julian: 188) Time: 14:00 Mean Canopy Height: 206.33 cm
Top Leaf Height: 175.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 175.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.44 0.24 0.48 0.71 1.67 0. 2.37 0.55 2.23 0. 2.77 0.59 1.38 0. 1.38 1.88
Dry Biomass Density:
Plant Water Density:

Corn Field # 1 Date: 7/30/82 (Julian: 211) Time: 11:00 Mean Canopy Height: 265.33 cm
 Top Leaf Height: 230.50 cm Top Cob Height: 138.50 cm Bottom Green Leaf Height: 39.83 cm Leaf Layer Depth: 190.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 62.24 64.69 63.39 74.68 77.64 80.61 86.02 77.95 78.42 78.17
 Wet Biomass Density: 0.20 0.11 0.23 0.54 0.73 1.58 3.05 0.53 1.43 0.16 1.90 0.44 0.75 1.75 1.41 1.73
 Dry Biomass Density: 0.07 0.04 0.08 0.18 0.35 0.28 0.02 0.17 0.38 0.31
 Plant Water Density: 0.12 0.07 0.14 0.54 1.15 0.59 1.10

Corn Field # 1 Date: 8/ 2/82 (Julian: 214) Time: 13:54 Mean Canopy Height: 282.17 cm
 Top Leaf Height: 261.17 cm Top Cob Height: 150.50 cm Bottom Green Leaf Height: 20.50 cm Leaf Layer Depth: 240.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.28 0.13 0.34 0.59 0.90 1.97 3.58 0.25 1.34 0.18 1.73 0.39 0.79 2.15 1.55 1.89
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 8/ 6/82 (Julian: 218) Time: 10:40 Mean Canopy Height: 272.83 cm
 Top Leaf Height: 241.50 cm Top Cob Height: 145.00 cm Bottom Green Leaf Height: 28.83 cm Leaf Layer Depth: 212.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 68.91 65.96 67.57 74.25 71.56 59.08 64.82 76.07 81.87 81.25 81.27 73.61 77.55 60.76 69.36 70.17
 Wet Biomass Density: 0.28 0.15 0.33 0.70 0.72 1.82 3.42 0.24 1.40 0.15 1.72 0.45 0.76 1.97 1.48 1.82
 Dry Biomass Density: 0.09 0.05 0.11 0.18 0.21 0.74 1.20 0.06 0.25 0.03 0.32 0.12 0.17 0.77 0.45 0.54
 Plant Water Density: 0.19 0.10 0.22 0.52 0.52 2.22 0.18 1.14 0.33 0.59 1.02 1.28

Corn Field # 1 Date: 8/ 9/82 (Julian: 221) Time: : Mean Canopy Height: 274.83 cm
 Top Leaf Height: 250.67 cm Top Cob Height: 144.83 cm Bottom Green Leaf Height: 22.83 cm Leaf Layer Depth: 227.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.40 0.19 0.48 0.64 1.00 2.06 3.89 0.19 1.47 0.27 1.91 0.43 0.89 2.33 1.73 2.09
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 8/11/82 (Julian: 223) Time: 13:11 Mean Canopy Height: 279.83 cm
 Top Leaf Height: 248.00 cm Top Cob Height: 142.00 cm Bottom Green Leaf Height: 21.17 cm Leaf Layer Depth: 226.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.25 0.11 0.28 0.56 0.70 1.84 3.23 0.28 1.38 0.07 1.67 0.39 0.73 1.91 1.41 1.73
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 8/16/82 (Julian: 228) Time: 16:00 Mean Canopy Height: 266.83 cm
 Top Leaf Height: 246.17 cm Top Cob Height: 136.33 cm Bottom Green Leaf Height: 55.17 cm Leaf Layer Depth: 191.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 66.74 67.64 67.73 74.30 76.94 52.60 61.84 71.98 80.78 73.36 79.08 72.24 78.51 54.34 66.39 67.34
 Wet Biomass Density: 0.30 0.17 0.40 0.63 0.99 2.20 4.09 0.47 1.52 0.20 1.93 0.49 0.89 2.40 1.79 2.14
 Dry Biomass Density: 0.10 0.06 0.13 0.16 0.23 1.04 1.56 0.13 0.29 0.05 0.40 0.13 0.19 1.09 0.60 0.70
 Plant Water Density: 0.20 0.12 0.27 0.47 0.76 2.53 0.34 1.23 1.52 0.35 0.70 1.19 1.44

Corn Field # 1 Date: 8/18/82 (Julian: 230) Time: 12:20 Mean Canopy Height: 259.50 cm
 Top Leaf Height: 234.17 cm Top Cob Height: 136.33 cm Bottom Green Leaf Height: 58.83 cm Leaf Layer Depth: 175.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.19 0.10 0.24 0.51 0.45 1.74 2.97 0.57 1.34 0.10 1.64 0.41 0.63 1.85 1.34 1.62
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 8/20/82 (Julian: 232) Time: 15:00 Mean Canopy Height: 270.50 cm
 Top Leaf Height: 255.00 cm Top Cob Height: 139.33 cm Bottom Green Leaf Height: 61.17 cm Leaf Layer Depth: 193.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.16 0.12 0.25 0.63 0.86 2.18 3.91 0.50 1.62 0.09 1.88 0.43 0.87 2.27 1.70 2.01
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 1 Date: 8/31/82 (Julian: 243) Time: 11:30 Mean Canopy Height: 268.67 cm
 Top Leaf Height: cm Top Cob Height: cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field-# 1 Date: 9/ 2/82 (Julian: 245) Time: : Mean Canopy Height: 257.50 cm
 Top Leaf Height: 231.83 cm Top Cob Height: 138.00 cm Bottom Green Leaf Height: 102.50 cm Leaf Layer Depth: 129.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 55.94 53.30 55.15 59.55 71.60 20.96 78.89 53.19 77.56 58.02 75. .99
 Wet Biomass Density: 0.22 0.06 0.22 0.45 0.60 1.13 2.37 1.42 0.05 1.48 0.41 0.69 1.18 1.15 1.36
 Dry Biomass Density: 0.10 0.03 0.10 0.18 0.17 0.30 0.02 0.33 0.17 0.17
 Plant Water Density: 0.12 0.03 0.12 0.27 0.43 1.12 1.15 0.24 0.53

Corn Field # 1 Date: 9/ 9/82 (Julian: 252) Time: 09:47 Mean Canopy Height: 276.67 cm
 Top Leaf Height: 242.00 cm Top Cob Height: 146.00 cm Bottom Green Leaf Height: 119.17 cm Leaf Layer Depth: 122.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 42.60 44.89 43.41 48.67 70.80 35.18 43.53 13.73 76.16 19.53 72.47 42.62 73.59 35.06 54.05 52.70
 Wet Biomass Density: 0.18 0.06 0.18 0.32 0.51 1.73 2.70 1.26 0.01 1.34 0.37 0.61 1.74 1.24 1.41
 Dry Biomass Density: 0.10 0.03 0.10 0.16 0.15 1.12 1.53 0.30 0.01 0.37 0.21 0.16 1.13 0.57 0.66
 Plant Water Density: 0.08 0.03 0.08 0.15 0.36 1.18 0.96 0.16 0.45 0.67 0.74

Corn Field # 2 Date: 5/19/82 (Julian: 139) Time: 11:25 Mean Canopy Height: 13.33 cm
 Top Leaf Height: 13.33 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 13.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 5/21/82 (Julian: 141) Time: 14:17 Mean Canopy Height: 17.33 cm
 Top Leaf Height: 17.33 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 17.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.06

Corn Field # 2 Date: 5/24/82 (Julian: 144) Time: 12:05 Mean Canopy Height: 23.50 cm
 Top Leaf Height: 22.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 22.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 5/26/82 (Julian: 146)
 Top Leaf Height: 23.83 cm Top Cob Height: 0. cm Leaf Layer Depth: 23.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.16
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 6/ 2/82 (Julian: 153)
 Top Leaf Height: 29.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 29.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 6/ 4/82 (Julian: 155)
 Top Leaf Height: 32.67 cm Top Cob Height: 0. cm Leaf Layer Depth: 32.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.51
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 6/14/82 (Julian: 165)
 Top Leaf Height: 47.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 47.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 83.65 0. 83.65 82.87 91.59 0. 87.37 79.23 93.07 0. 91.37 82.67 92.57 0. 92.57 88.59
 Wet Biomass Density: 0.53 0. 0.52 0.64 0.68 0. 1.31 0.18 1.32 0. 1.51 0.45 0.67 0. 0.67 1.11
 Dry Biomass Density: 0.09 0. 0.09 0.11 0.06 0. 0.17 0.04 0.09 0. 0.13 0.08 0.05 0. 0.05 0.13
 Plant Water Density: 0.44 0. 0.44 0.53 0.62 1.15 0.15 1.23 1.38 0.37 0.62 0.62 0.99

Corn Field # 2 Date: 6/16/82 (Julian: 167)
 Top Leaf Height: 51.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 51.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.83 0. 0.79 0.68 0.79 0. 1.47 0.16 1.03 0. 1.19 0.55 0.61 0. 0.61 1.15
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 6/21/82 (Julian: 172)
 Top Leaf Height: 78.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 78.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 83.62 0. 83.62 84.19 92.31 0. 88.97 84.56 79.73 0. 80.43 84.09 83.90 0. 83.90 83.96
 Wet Biomass Density: 0.55 0. 0.53 0.74 1.06 0. 1.80 0.37 2.13 0. 2.50 0.55 1.06 0. 1.06 1.61
 Dry Biomass Density: 0.09 0. 0.09 0.12 0.08 0. 0.20 0.06 0.43 0. 0.49 0.09 0.17 0. 0.17 0.26
 Plant Water Density: 0.46 0. 0.45 0.62 0.98 1.60 0.31 1.70 2.01 0.46 0.89 0.89 1.35

Corn Field # 2 Date: 6/24/82 (Julian: 175)
 Top Leaf Height: 93.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 93.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 1.00 0. 0.99 0.79 0.79 0. 1.57 0.44 2.20 0. 2.64 0.74 1.00 0. 1.00 1.73
 Dry Biomass Density:
 Plant Water Density:

Corn field # 2 Date: 6/28/82 (Julian: 179) Time: 14:37 Mean Canopy Height: 125.67 cm
 Top Leaf Height: 125.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 125.00 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.53 0.17 0.69 0.62 1.41 0. 2.03 0.33 2.34 0. 2.67 0.50 1.31 0. 1.31 1.80
 Dry Biomass Density:
 Plant Water Density:

Corn field # 2 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 130.17 cm
 Top Leaf Height: 130.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 130.00 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 2 Date: 7/ 6/82 (Julian: 187) Time: 11:23 Mean Canopy Height: 173.17 cm
 Top Leaf Height: 173.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 173.00 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 78.56 85.82 81.86 82.48 90.43 0. 87.55 83.84 89.83 0. 89.03 82.28 89.92 0. 89.92 87.87
 Dry Biomass Density: 0.18 0.15 0.33 0.87 1.53 0. 2.40 0.32 2.05 0. 2.37 0.46 1.24 0. 1.24 1.70
 Plant Water Density: 0.04 0.02 0.06 0.15 0.15 0. 0.30 0.05 0.21 0. 0.26 0.08 0.13 0. 0.13 0.21
 Plant Water Density: 0.14 0.13 0.27 0.72 1.38 2.10 0.27 1.84 2.11 0.37 1.12 1.12 1.49

Corn field # 2 Date: 7/ 7/82 (Julian: 188) Time: 13:40 Mean Canopy Height: 195.00 cm
 Top Leaf Height: 171.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 171.00 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.35 0.99 1.21 0.59 0.72 0. 1.31 0.17 1.03 0. 1.20 0.37 0.92 0. 0.92 1.24
 Dry Biomass Density:
 Plant Water Density:

Corn field # 2 Date: 7/12/82 (Julian: 193) Time: : Mean Canopy Height: 204.67 cm
 Top Leaf Height: 191.50 cm Top Cob Height: 123.75 cm Bottom Green Leaf Height: 22.17 cm Leaf Layer Depth: 169.33 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 76.52 82.44 80.28 80.64 87.45 92.54 86.43 79.91 86.48 79.45 86.37
 Wet Biomass Density: 0.35 0.50 0.78 0.59 1.68 0.19 2.55 0.42 1.29 0.07 1.68 0.47 1.15 0.27 1.28 1.67
 Dry Biomass Density: 0.08 0.09 0.15 0.11 0.21 0.01 0.35 0.08 0.17 0.10 0.16
 Plant Water Density: 0.27 0.41 0.63 0.48 1.47 2.20 0.33 1.12 0.37 1.00

Corn field # 2 Date: 7/13/82 (Julian: 194) Time: 11:30 Mean Canopy Height: 227.83 cm
 Top Leaf Height: 196.33 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 22.50 cm Leaf Layer Depth: 173.83 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.24 0.24 0.38 0.57 0.88 0.40 1.98 0.69 1.91 0.12 2.56 0.52 1.01 0.52 1.24 1.64
 Dry Biomass Density:
 Plant Water Density:

Corn field # 2 Date: 7/15/82 (Julian: 196) Time: 12:52 Mean Canopy Height: 232.83 cm
 Top Leaf Height: 195.67 cm Top Cob Height: 128.25 cm Bottom Green Leaf Height: 21.17 cm Leaf Layer Depth: 174.50 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 77.59
 Wet Biomass Density: 0.26 0.26 0.40 0.49 0.97 0.33 1.89 0.50 1.52 0.08 1.99 0.44 0.92 0.41 1.09 1.42
 Dry Biomass Density: 0.11
 Plant Water Density: 0.38

Corn Field # 2 Date: 7/19/82 (Julian: 200) Time: 10:00 Mean Canopy Height: 221.50 cm
 Top Leaf Height: 182.00 cm Top Cob Height: 113.40 cm Bottom Green Leaf Height: 27.20 cm Leaf Layer Depth: 154.80 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 77.56 75.20 76.16 77.06 83.84 89.02 83.92 79.26 82.18 88.97 82.29 78.10 82.07 89.01 83.74 82.43
 Wet Biomass Density: 0.26 0.18 0.30 0.35 0.60 0.35 1.42 0.58 1.31 0.14 1.87 0.40 0.70 0.49 0.92 1.19
 Dry Biomass Density: 0.06 0.04 0.07 0.08 0.10 0.04 0.23 0.12 0.23 0.02 0.33 0.09 0.12 0.05 0.15 0.21
 Plant Water Density: 0.20 0.13 0.23 0.27 0.50 1.19 0.46 1.08 1.54 0.31 0.57 0.31 0.57 0.77 0.98 0.98

Corn Field # 2 Date: 7/23/82 (Julian: 204) Time: 13:38 Mean Canopy Height: 240.67 cm
 Top Leaf Height: 194.67 cm Top Cob Height: 121.50 cm Bottom Green Leaf Height: 24.83 cm Leaf Layer Depth: 169.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.23 0.16 0.26 0.43 0.77 0.89 2.30 0.55 1.69 0.27 2.41 0.43 0.87 1.16 1.35 1.66
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 7/26/82 (Julian: 207) Time: 14:20 Mean Canopy Height: 233.00 cm
 Top Leaf Height: 195.50 cm Top Cob Height: 122.83 cm Bottom Green Leaf Height: 23.67 cm Leaf Layer Depth: 171.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.19 0.14 0.23 0.38 0.56 1.12 2.39 0.54 1.45 0.07 1.91 0.39 0.71 1.19 1.22 1.51
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 7/28/82 (Julian: 209) Time: 14:28 Mean Canopy Height: 226.83 cm
 Top Leaf Height: 208.00 cm Top Cob Height: 113.33 cm Bottom Green Leaf Height: 22.17 cm Leaf Layer Depth: 185.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.15 0.17 0.28 0.36 0.63 1.27 2.68 0.66 1.79 0.13 2.43 0.38 0.86 1.41 1.48 1.80
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 7/30/82 (Julian: 211) Time: 11:20 Mean Canopy Height: 233.67 cm
 Top Leaf Height: 198.17 cm Top Cob Height: 114.83 cm Bottom Green Leaf Height: 28.33 cm Leaf Layer Depth: 169.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 66.06 67.49 66.89 72.79 75.38 81.38 78.54 76.17 79.89 87.36 80.34 73.77 77.93 82.59 80.05 78.85
 Wet Biomass Density: 0.21 0.16 0.27 0.48 0.71 1.38 2.96 0.89 1.78 0.35 2.79 0.53 0.88 1.73 1.62 2.01
 Dry Biomass Density: 0.07 0.05 0.09 0.13 0.18 0.26 0.64 0.21 0.36 0.04 0.55 0.14 0.20 0.30 0.32 0.43
 Plant Water Density: 0.14 0.11 0.18 0.35 0.54 2.33 0.67 1.42 2.24 0.39 0.69 0.39 0.69 1.30 1.58 1.58

Corn Field # 2 Date: 8/ 2/82 (Julian: 214) Time: 14:30 Mean Canopy Height: 232.83 cm
 Top Leaf Height: 194.17 cm Top Cob Height: 116.67 cm Bottom Green Leaf Height: 24.83 cm Leaf Layer Depth: 169.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.20 0.13 0.23 0.60 0.67 1.35 3.00 0.43 1.47 0.28 2.12 0.46 0.75 1.63 1.45 1.79
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 8/ 6/82 (Julian: 218) Time: 10:39 Mean Canopy Height: 240.83 cm
 Top Leaf Height: 209.50 cm Top Cob Height: 123.83 cm Bottom Green Leaf Height: 22.00 cm Leaf Layer Depth: 187.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 67.84 71.02 69.52 76.54 75.56 81.39 77.98 79.94 75.02 0.49 0.94 2.26 1.87 2.26 2.26
 Wet Biomass Density: 0.27 0.19 0.35 0.68 0.99 1.86 3.98 0.43 1.62 0.41 2.44 0.49 0.94 2.26 1.87 2.26
 Dry Biomass Density: 0.09 0.05 0.11 0.16 0.11 0.30 0.09 0.49 0.12 0.11 0.30 0.09 0.49 0.12 0.11 0.12
 Plant Water Density: 0.19 0.13 0.25 0.52 0.32 1.32 1.95 0.37 0.37 0.37 0.37 0.37 0.37 0.37 0.37 0.37

Corn Field # 2 Date: 8/ 9/82 (Julian: 221) Time: 11:10 Mean Canopy Height: 238.67 cm
 Top Leaf Height: 203.67 cm Top Cob Height: 126.17 cm Bottom Green Leaf Height: 51.83 cm Leaf Layer Depth: 151.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.22 0.13 0.26 0.47 0.64 1.51 3.00 0.53 1.19 0.06 1.44 0.41 0.65 1.56 1.31 1.57
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 8/16/82 (Julian: 228) Time: 15:35 Mean Canopy Height: 231.33 cm
 Top Leaf Height: 212.67 cm Top Cob Height: 114.33 cm Bottom Green Leaf Height: 32.83 cm Leaf Layer Depth: 179.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 66.11 7 92 78.80 77.73 80.60 86.14 80.66 74.11
 Wet Biomass Density: 0.19 0.16 0.30 0.62 0.71 1.89 3.78 0.62 1.46 0.16 2.02 0.48 0.77 2.05 1.66 2.03
 Dry Biomass Density: 0.07 0.16 0.15 0.14 0.28 0.02 0.39 0.12
 Plant Water Density: 0.13 0.46 0.56 0.48 1.17 1.63 0.36

Corn Field # 2 Date: 8/18/82 (Julian: 230) Time: 13:05 Mean Canopy Height: 230.00 cm
 Top Leaf Height: 190.50 cm Top Cob Height: 110.67 cm Bottom Green Leaf Height: 57.50 cm Leaf Layer Depth: 133.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.21 0.14 0.24 0.58 0.81 1.87 3.84 0.81 1.18 0.10 1.51 0.51 0.71 1.98 1.57 1.86
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 8/31/82 (Julian: 243) Time: 11:05 Mean Canopy Height: 230.83 cm
 Top Leaf Height: cm Top Cob Height: cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 2 Date: 9/ 2/82 (Julian: 245) Time: 14:00 Mean Canopy Height: 244.67 cm
 Top Leaf Height: 210.00 cm Top Cob Height: 121.67 cm Bottom Green Leaf Height: 87.17 cm Leaf Layer Depth: 122.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 58.36 58.48 58.40 56.71 74.09 37.39 46.50 47.92 77.90 56.67 75.80
 Wet Biomass Density: 0.21 0.08 0.20 0.30 0.60 1.77 3.08 1.17
 Dry Biomass Density: 0.09 0.03 0.09 0.13 0.16 1.11 1.65 0.26
 Plant Water Density: 0.12 0.05 0.12 0.17 0.45 1.43 0.91

Corn Field # 2 Date: 9/ 9/82 (Julian: 252) Time: 09:25 Mean Canopy Height: 243.50 cm
 Top Leaf Height: 199.50 cm Top Cob Height: 121.17 cm Bottom Green Leaf Height: 97.50 cm Leaf Layer Depth: 102.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 35.16 37.05 36.05 48.29 73.55 36.40 45.15 21.82 78.16 58.82 74.29 40.64 75.55 36.75 56.47 54.85
 Wet Biomass Density: 0.16 0.07 0.14 0.29 0.56 1.57 2.78 1.40 0.03 1.52 0.36 0.68 1.59 1.33 1.48
 Dry Biomass Density: 0.11 0.04 0.09 0.15 0.15 1.00 1.53 0.31 0.01 0.39 0.21 0.17 1.01 0.58 0.67
 Plant Water Density: 0.06 0.02 0.05 0.14 0.41 1.26 1.09 0.15 0.51 0.75 0.81

Corn Field # 2 Date: 9/16/82 (Julian: 259) Time: 10:40 Mean Canopy Height: 250.33 cm
 Top Leaf Height: 209.50 cm Top Cob Height: 132.00 cm Bottom Green Leaf Height: 97.50 cm Leaf Layer Depth: 112.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 6.64 14.56 10.89 6.02 58.47 28.93 33.12 6.96 74.70 29.44 63.64 6.37 68.91 29.01 47.87 45.09
 Wet Biomass Density: 0.08 0.04 0.08 0.13 0.39 1.22 1.99 1.11 0.21 1.43 0.17 0.52 1.44 1.09 1.17
 Dry Biomass Density: 0.07 0.04 0.07 0.13 0.16 0.87 1.33 0.28 0.15 0.52 0.16 0.16 1.02 0.57 0.64
 Plant Water Density: 0.01 0.01 0.01 0.01 0.23 0.66 0.83 0.01 0.35 0.52 0.53

Corn field # 2 Date: 9/23/82 (Julian: 206) Time: 13:00 Mean Canopy Height: 232.17 cm
 Top Leaf Height: 174.00 cm Top Cob Height: cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 5.93 9.57 7.49 7.66 49.09 20.41 24.76 5.30 68.85 27.57 63.23 6.73 60.62 20.55 38.26 35.51
 Wet Biomass Density: 0.04 0.10 0.13 0.34 1.16 1.87 0.74 0.02 0.82 0.38 1.19 0.85 0.93
 Dry Biomass Density: 0.04 0.09 0.12 0.17 0.92 1.41 0.23 0.02 0.30 0.15 0.94 0.52 0.69
 Plant Water Density: 0.00 0.01 0.01 0.17 0.46 0.51 0.52 0.23 0.32 0.33

Corn field # 2 Date: 9/28/82 (Julian: 271) Time: 11:10 Mean Canopy Height: 250.00 cm
 Top Leaf Height: cm Top Cob Height: cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 5.93 9.57 7.49 7.66 49.09 20.41 24.76 5.30 68.85 27.57 63.23 6.73 60.62 20.55 38.26 35.51
 Wet Biomass Density: 0.04 0.10 0.13 0.34 1.16 1.87 0.74 0.02 0.82 0.38 1.19 0.85 0.93
 Dry Biomass Density: 0.04 0.09 0.12 0.17 0.92 1.41 0.23 0.02 0.30 0.15 0.94 0.52 0.69
 Plant Water Density: 0.00 0.01 0.01 0.17 0.46 0.51 0.52 0.23 0.32 0.33

Corn field # 2 Date: 9/30/82 (Julian: 273) Time: 12:10 Mean Canopy Height: 209.17 cm
 Top Leaf Height: cm Top Cob Height: 97.33 cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.06 0.09 0.06 0.19 0.92 1.56 0.66 0.09 0.89 0.30 1.01 0.78 0.85
 Wet Biomass Density: 0.06 0.09 0.06 0.19 0.92 1.56 0.66 0.09 0.89 0.30 1.01 0.78 0.85
 Dry Biomass Density: 0.06 0.09 0.06 0.19 0.92 1.56 0.66 0.09 0.89 0.30 1.01 0.78 0.85
 Plant Water Density: 0.06 0.09 0.06 0.19 0.92 1.56 0.66 0.09 0.89 0.30 1.01 0.78 0.85

Corn field # 2 Date: 10/ 5/82 (Julian: 278) Time: 15:45 Mean Canopy Height: 229.33 cm
 Top Leaf Height: cm Top Cob Height: 111.83 cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.29 5.39 3.29 0.39 34.84 15.79 18.71 59.80 7.21 45.10 15.68 25.85
 Wet Biomass Density: 0.05 0.10 0.08 0.36 1.14 1.93 0.38 0.01 0.41 0.26 1.15 0.77 0.81
 Dry Biomass Density: 0.05 0.09 0.08 0.24 0.96 1.57 0.15 0.01 0.15 0.15 0.97 0.57 0.20
 Plant Water Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20

Corn field # 3 Date: 5/19/82 (Julian: 139) Time: : Mean Canopy Height: 22.83 cm
 Top Leaf Height: 22.83 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 22.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Wet Biomass Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Dry Biomass Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Plant Water Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20

Corn field # 3 Date: 5/21/82 (Julian: 141) Time: 14:38 Mean Canopy Height: 27.67 cm
 Top Leaf Height: 27.67 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 27.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Wet Biomass Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Dry Biomass Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Plant Water Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20

Corn field # 3 Date: 5/24/82 (Julian: 144) Time: : Mean Canopy Height: 32.00 cm
 Top Leaf Height: 32.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 32.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Wet Biomass Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Dry Biomass Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20
 Plant Water Density: 0.00 0.00 0.00 0.13 0.36 0.23 0.12 0.12 0.20

Corn field # 3 Date: 5/26/82 (Julian: 146) Time: 14:20 Mean Canopy Height: 34.67 cm
 Top Leaf Height: 34.67 cm Top Cob Height: 0. cm Leaf Layer Depth: 34.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.47
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 3 Date: 6/ 1/82 (Julian: 152) Time: 13:02 Mean Canopy Height: 51.50 cm
 Top Leaf Height: 51.50 cm Top Cob Height: 0. cm Leaf Layer Depth: 51.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.79
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 3 Date: 6/ 2/82 (Julian: 153) Time: 12:26 Mean Canopy Height: 49.67 cm
 Top Leaf Height: 49.67 cm Top Cob Height: 0. cm Leaf Layer Depth: 49.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.97
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 3 Date: 6/ 4/82 (Julian: 155) Time: 14:12 Mean Canopy Height: 54.50 cm
 Top Leaf Height: 54.50 cm Top Cob Height: 0. cm Leaf Layer Depth: 54.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.21
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 3 Date: 6/ 7/82 (Julian: 158) Time: 10:00 Mean Canopy Height: 63.00 cm
 Top Leaf Height: 63.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 63.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.66
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 3 Date: 6/ 9/82 (Julian: 160) Time: 13:57 Mean Canopy Height: 72.17 cm
 Top Leaf Height: 72.17 cm Top Cob Height: 0. cm Leaf Layer Depth: 72.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.66
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 3 Date: 6/14/82 (Julian: 165) Time: 15:20 Mean Canopy Height: 77.83 cm
 Top Leaf Height: 77.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 77.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 81.13 0. 81.13 82.81 90.05 0. 86.90 83.47 94.00 0. 91.85 82.58 92.91 0. 92.91 89.25
 Wet Biomass Density: 0.41 0. 0.39 0.57 0.73 0. 1.30 0.49 1.91 0. 2.41 0.49 0.88 0. 0.88 1.37
 Dry Biomass Density: 0.08 0. 0.07 0.10 0.07 0. 0.17 0.08 0.11 0. 0.20 0.09 0.06 0. 0.06 0.15
 Plant Water Density: 0.33 0. 0.32 0.47 0.66 0. 1.13 0.41 1.80 2.21 0.40 0.82 1.22

Corn Field # 3 Date: 6/16/82 (Julian: 167) Time: 10:30 Mean Canopy Height: 84.50 cm
 Top Leaf Height: 84.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 84.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.93 0. 0.91 0.55 0.92 0. 1.47 0.20 1.75 0. 1.95 0.56 0.89 0. 0.89 1.44
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 6/18/82 (Julian: 169) Time: 13:40 Mean Canopy Height: 113.00 cm
 Top Leaf Height: 113.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 113.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.42 0. 0.42 0.81 1.13 0. 1.93 0.41 2.64 0. 3.05 0.55 1.25 0. 1.25 1.80
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 6/21/82 (Julian: 172) Time: 10:14 Mean Canopy Height: 120.83 cm
 Top Leaf Height: 120.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 120.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 83.54 88.23 84.36 84.26 93.91 0. 90.28 84.70 94.42 0. 93.11 84.16 94.09 0. 94.09 91.11
 Dry Biomass Density: 0.67 0.14 0.79 1.19 1.98 0. 3.17 0.54 3.46 0. 3.99 0.80 1.86 0. 1.86 2.65
 Plant Water Density: 0.11 0.02 0.12 0.19 0.12 0. 0.31 0.08 0.19 0. 0.27 0.13 0.11 0. 0.11 0.24
 Plant Water Density: 0.56 0.12 0.67 1.01 1.86 2.86 0.45 3.26 3.72 0.67 1.75 1.75 2.42

Corn Field # 3 Date: 6/23/82 (Julian: 174) Time: : Mean Canopy Height: 128.33 cm
 Top Leaf Height: 128.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 128.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 1.13 0. 1.13 0.88 2.07 0. 2.95 0.41 3.25 0. 3.65 0.81 1.77 0. 1.77 2.58
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 6/25/82 (Julian: 176) Time: 12:55 Mean Canopy Height: 155.67 cm
 Top Leaf Height: 155.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 155.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 8.36 0. 8.25 0.89 2.10 0. 2.98 0.42 3.03 0. 3.45 3.20 1.71 0. 1.71 4.89
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 6/28/82 (Julian: 179) Time: 14:20 Mean Canopy Height: 197.33 cm
 Top Leaf Height: 197.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 197.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.52 0.44 0.96 0.49 1.87 0. 2.37 0.53 2.53 0. 3.05 0.51 1.61 0. 1.61 2.13
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 212.00 cm
 Top Leaf Height: 212.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 212.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 7/ 6/82 (Julian: 187) Time: : Mean Canopy Height: 253.00 cm
 Top Leaf Height: 224.83 cm Top Cob Height: 141.33 cm Bottom Green Leaf Height: 21.17 cm Leaf Layer Depth: 203.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 79.13 85.73 82.40 82.58 91.53 91.80 89.22 83.48 87.24 0. 86.64 81.85 28.37 91.80 88.89 87.11
 Wet Biomass Density: 0.68 0.45 0.90 0.70 1.22 0.60 2.63 0.60 2.34 0. 2.79 0.66 1.34 0.60 1.57 2.11
 Dry Biomass Density: 0.14 0.06 0.16 0.12 0.10 0.05 0.28 0.10 0.30 0. 0.37 0.12 0.16 0.05 0.17 0.27
 Plant Water Density: 0.54 0.38 0.74 0.58 1.11 2.34 0.50 2.04 2.42 0.54 1.18 1.40 1.83

Corn Field # 3 Date: 7/ 7/82 (Julian: 188) Time: 14:20 Mean Canopy Height: 270.83 cm
 Top Leaf Height: 255.67 cm Top Cob Height: 151.17 cm Bottom Green Leaf Height: 29.00 cm Leaf Layer Depth: 226.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE

% Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 7/12/82 (Julian: 193) Time: 09:30 Mean Canopy Height: 282.50 cm
 Top Leaf Height: 251.50 cm Top Cob Height: 159.50 cm Bottom Green Leaf Height: 29.67 cm Leaf Layer Depth: 221.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 75.61 80.07 77.99 86.53 84.36 93.13 88.12 81.38 85.61 91.70 85.62 83.38 84.86 92.80 87.07 86.23
 Wet Biomass Density: 0.32 0.25 0.46 0.82 1.10 1.02 3.00 0.66 2.29 0.30 3.06 0.63 1.21 1.32 1.68 2.17
 Dry Biomass Density: 0.08 0.05 0.10 0.11 0.17 0.07 0.36 0.12 0.33 0.02 0.44 0.10 0.18 0.10 0.22 0.33
 Plant Water Density: 0.24 0.20 0.36 0.71 0.93 2.65 0.53 1.96 2.62 0.53 1.03 1.46 1.88

Corn Field # 3 Date: 7/15/82 (Julian: 196) Time: 12:32 Mean Canopy Height: 292.67 cm
 Top Leaf Height: 262.50 cm Top Cob Height: 165.83 cm Bottom Green Leaf Height: 35.33 cm Leaf Layer Depth: 227.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE

% Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 7/19/82 (Julian: 200) Time: 10:50 Mean Canopy Height: 282.17 cm
 Top Leaf Height: 259.00 cm Top Cob Height: 154.83 cm Bottom Green Leaf Height: 33.50 cm Leaf Layer Depth: 225.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 70.92 74.92 72.82 76.20 79.57 87.68 82.98 80.26 81.18 91.71 83.08 76.70 80.33 88.73 83.86 82.44
 Wet Biomass Density: 0.28 0.19 0.40 0.72 0.94 1.61 3.38 0.69 2.06 0.57 3.11 0.57 1.07 2.18 1.84 2.29
 Dry Biomass Density: 0.08 0.05 0.11 0.17 0.19 0.20 0.57 0.14 0.39 0.05 0.53 0.13 0.21 0.25 0.30 0.40
 Plant Water Density: 0.20 0.14 0.29 0.55 0.75 2.80 0.55 1.67 2.58 0.44 0.86 1.54 1.89

Corn Field # 3 Date: 7/23/82 (Julian: 204) Time: 13:25 Mean Canopy Height: 281.00 cm
 Top Leaf Height: 252.50 cm Top Cob Height: 151.50 cm Bottom Green Leaf Height: 38.67 cm Leaf Layer Depth: 213.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE

% Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 3 Date: 7/26/82 (Julian: 207) Time: 13:50 Mean Canopy Height: 284.17 cm
 Top Leaf Height: 250.33 cm Top Cob Height: 158.83 cm Bottom Green Leaf Height: 32.83 cm Leaf Layer Depth: 217.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.26 0.16 0.33 0.67 0.78 1.84 3.40 0.51 1.75 0.37 2.47 0.51 0.90 2.22 1.68 2.07
 Dry Biomass Density:
 Plant Water Density:

Corn field # 3 Date: 7/28/82 (Julian: 209) Time: 15:31 Mean Canopy Height: 291.17 cm
 Top Leaf Height: 251.17 cm Top Cob Height: 155.00 cm Bottom Green Leaf Height: 44.83 cm Leaf Layer Depth: 206.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.36 0.17 0.38 0.54 0.89 1.99 3.48 0.54 1.62 0.09 2.00 0.49 0.89 2.08 1.61 1.95
 Wet Biomass Density: 0.36 0.17 0.38 0.54 0.89 1.99 3.48 0.54 1.62 0.09 2.00 0.49 0.89 2.08 1.61 1.95
 Dry Biomass Density: 0.36 0.17 0.38 0.54 0.89 1.99 3.48 0.54 1.62 0.09 2.00 0.49 0.89 2.08 1.61 1.95
 Plant Water Density: 0.36 0.17 0.38 0.54 0.89 1.99 3.48 0.54 1.62 0.09 2.00 0.49 0.89 2.08 1.61 1.95

Corn field # 3 Date: 7/30/82 (Julian: 211) Time: 13:15 Mean Canopy Height: 272.33 cm
 Top Leaf Height: 241.83 cm Top Cob Height: 140.50 cm Bottom Green Leaf Height: 57.00 cm Leaf Layer Depth: 184.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 67.26 68.41 67.86 71.74 75.28 65.59 68.86 67.55 81.43 88.47 79.77 69.54 78.61 67.47 73.55 72.84
 Wet Biomass Density: 0.31 0.22 0.43 0.58 0.93 2.13 3.86 1.10 1.91 0.19 2.53 0.59 1.02 2.32 1.83 2.27
 Dry Biomass Density: 0.10 0.07 0.14 0.16 0.23 0.73 1.20 0.36 0.36 0.02 0.51 0.18 0.22 0.75 0.50 0.62
 Plant Water Density: 0.21 0.15 0.29 0.42 0.70 2.66 0.74 1.56 2.02 0.41 0.80 0.41 0.80 2.02 1.38 1.66

Corn field # 3 Date: 8/ 2/82 (Julian: 214) Time: : Mean Canopy Height: 266.83 cm
 Top Leaf Height: 245.17 cm Top Cob Height: 145.67 cm Bottom Green Leaf Height: 57.00 cm Leaf Layer Depth: 188.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.28 0.24 0.45 0.69 1.24 2.45 4.68 1.00 2.77 0.28 3.44 0.60 1.42 2.73 2.44 2.86
 Wet Biomass Density: 0.28 0.24 0.45 0.69 1.24 2.45 4.68 1.00 2.77 0.28 3.44 0.60 1.42 2.73 2.44 2.86
 Dry Biomass Density: 0.28 0.24 0.45 0.69 1.24 2.45 4.68 1.00 2.77 0.28 3.44 0.60 1.42 2.73 2.44 2.86
 Plant Water Density: 0.28 0.24 0.45 0.69 1.24 2.45 4.68 1.00 2.77 0.28 3.44 0.60 1.42 2.73 2.44 2.86

Corn field # 3 Date: 8/ 6/82 (Julian: 218) Time: 11:38 Mean Canopy Height: 274.33 cm
 Top Leaf Height: 252.83 cm Top Cob Height: 150.67 cm Bottom Green Leaf Height: 57.00 cm Leaf Layer Depth: 195.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 68.71 67.78 68.35 75.99 57.17 72.33 78.72 80.94 78.72 77.15 58.72 68.46 0.40 0.85 2.09 1.62 1.90
 Wet Biomass Density: 0.34 0.17 0.43 0.55 0.80 1.95 3.49 0.14 1.59 0.14 1.79 0.40 0.85 2.09 1.62 1.90
 Dry Biomass Density: 0.11 0.05 0.14 0.19 0.84 0.04 0.34 0.03 0.38 0.20 0.86 0.51 0.20 0.86 0.51 0.51
 Plant Water Density: 0.23 0.11 0.29 0.61 0.10 1.25 0.10 1.25 0.03 0.38 0.20 0.86 0.51 0.20 0.86 0.51

Corn field # 3 Date: 8/ 9/82 (Julian: 221) Time: 13:10 Mean Canopy Height: 276.00 cm
 Top Leaf Height: 251.17 cm Top Cob Height: 147.17 cm Bottom Green Leaf Height: 57.00 cm Leaf Layer Depth: 194.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.37 0.17 0.44 0.46 0.83 2.05 3.51 0.20 1.45 0.13 1.67 0.38 0.82 2.18 1.61 1.87
 Wet Biomass Density: 0.37 0.17 0.44 0.46 0.83 2.05 3.51 0.20 1.45 0.13 1.67 0.38 0.82 2.18 1.61 1.87
 Dry Biomass Density: 0.37 0.17 0.44 0.46 0.83 2.05 3.51 0.20 1.45 0.13 1.67 0.38 0.82 2.18 1.61 1.87
 Plant Water Density: 0.37 0.17 0.44 0.46 0.83 2.05 3.51 0.20 1.45 0.13 1.67 0.38 0.82 2.18 1.61 1.87

Corn field # 3 Date: 8/16/82 (Julian: 228) Time: 10:41 Mean Canopy Height: 267.17 cm
 Top Leaf Height: 256.17 cm Top Cob Height: 150.33 cm Bottom Green Leaf Height: 57.00 cm Leaf Layer Depth: 199.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 70.02 66.55 68.66 76.77 44.79 72.23 79.00 66.45 77.29 77.81 46.75 62.71 0.45 0.97 2.46 1.90 2.23
 Wet Biomass Density: 0.24 0.13 0.34 0.67 0.81 2.24 3.99 0.36 1.97 0.22 2.35 0.45 0.97 2.46 1.90 2.23
 Dry Biomass Density: 0.07 0.04 0.11 0.19 1.24 0.10 0.41 0.07 0.53 0.22 1.31 0.71 0.22 1.31 0.71 0.71
 Plant Water Density: 0.17 0.09 0.23 0.62 0.26 1.56 1.82 0.26 1.56 0.07 0.53 0.22 1.31 0.71 0.71 0.71

Corn field # 3 Date: 8/18/82 (Julian: 230) Time: : Mean Canopy Height: 269.00 cm
 Top Leaf Height: 224.17 cm Top Cob Height: 155.17 cm Bottom Green Leaf Height: 113.80 cm Leaf Layer Depth: 110.37 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.57 0.12 0.41 0.42 0.75 1.75 3.13 1.66 0.19 1.90 0.59 0.84 1.95 1.57 1.81 1.81
 Wet Biomass Density: 0.57 0.12 0.41 0.42 0.75 1.75 3.13 1.66 0.19 1.90 0.59 0.84 1.95 1.57 1.81 1.81
 Dry Biomass Density: 0.57 0.12 0.41 0.42 0.75 1.75 3.13 1.66 0.19 1.90 0.59 0.84 1.95 1.57 1.81 1.81
 Plant Water Density: 0.57 0.12 0.41 0.42 0.75 1.75 3.13 1.66 0.19 1.90 0.59 0.84 1.95 1.57 1.81 1.81

Corn Field # 4 Date: 5/21/82 (Julian: 141) Time: 11:41 Mean Canopy Height: 28.33 cm
 Top Leaf Height: 28.33 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 28.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.26

Corn Field # 4 Date: 5/24/82 (Julian: 144) Time: 13:40 Mean Canopy Height: 42.17 cm
 Top Leaf Height: 42.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 42.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 4 Date: 6/ 1/82 (Julian: 152) Time: 13:40 Mean Canopy Height: 57.33 cm
 Top Leaf Height: 57.33 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 57.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 1.01

Corn Field # 4 Date: 6/ 2/82 (Julian: 153) Time: 13:13 Mean Canopy Height: 58.00 cm
 Top Leaf Height: 58.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 58.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 1.46

Corn Field # 4 Date: 6/ 7/82 (Julian: 158) Time: 15:39 Mean Canopy Height: 63.17 cm
 Top Leaf Height: 63.17 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 63.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 1.97

Corn Field # 4 Date: 6/16/82 (Julian: 167) Time: 14:10 Mean Canopy Height: 102.33 cm
 Top Leaf Height: 102.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 102.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 86.22 0. 86.22 85.92 94.18 0. 91.74 0. 95.89 0. 95.89 86.14 95.31 0. 95.31 92.21
 Wet Biomass Density: 1.67 0. 1.66 0.64 1.52 0. 2.15 0. 2.98 0. 2.98 0.77 1.50 0. 1.50 2.26
 Dry Biomass Density: 0.23 0. 0.23 0.09 0.09 0. 0.18 0. 0.12 0. 0.12 0.11 0.07 0. 0.07 0.18
 Plant Water Density: 1.44 0. 1.43 0.55 1.43 0. 1.97 0. 2.85 0. 2.85 0.66 1.43 0. 1.43 2.09

Corn Field # 4 Date: 6/18/82 (Julian: 169) Time: 09:20 Mean Canopy Height: 120.33 cm
 Top Leaf Height: 120.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 120.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.42 0. 0.41 1.03 1.50 0. 2.53 0.57 3.35 0. 3.93 0.67 1.62 0. 1.62 2.29
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 4 Date: 6/21/82 (Julian: 172) Time: 14:08 Mean Canopy Height: 137.17 cm
 Top Leaf Height: 137.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COUS L123SC WHOLE
 Plant Parts: 81.03 0. 81.03 84.59 92.99 0. 89.56 86.17 96.70 0. 95.09 84.22 95.54 0. 95.54 92.09
 % Plant Moisture: 0.52 0. 0.51 1.10 1.59 0. 2.69 0.64 3.53 0. 4.16 0.75 1.71 0. 1.71 2.46
 Wet Biomass Density: 0.10 0. 0.10 0.17 0.11 0. 0.28 0.09 0.12 0. 0.20 0.12 0.08 0. 0.08 0.19
 Dry Biomass Density: 0.42 0. 0.42 0.93 1.48 0. 2.41 0.55 3.41 0. 3.96 0.63 1.63 0. 1.63 2.26
 Plant Water Density:

Corn Field # 4 Date: 6/25/82 (Julian: 176) Time: 14:10 Mean Canopy Height: 178.50 cm
 Top Leaf Height: 178.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COUS L123SC WHOLE
 Plant Parts: 0.41 0. 0.41 1.01 1.79 0. 2.80 0.46 3.21 0. 3.68 0.63 1.67 0. 1.67 2.30
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 4 Date: 6/28/82 (Julian: 179) Time: 11:17 Mean Canopy Height: 213.33 cm
 Top Leaf Height: 213.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COUS L123SC WHOLE
 Plant Parts: 79.11 0. 79.11 82.74 95.13 0. 91.46 86.45 93.08 0. 92.14 83.38 93.98 0. 93.98 91.43
 % Plant Moisture: 0.18 0. 0.18 0.84 1.99 0. 2.83 0.43 2.55 0. 2.98 0.48 1.52 0. 1.52 2.00
 Wet Biomass Density: 0.04 0. 0.04 0.14 0.10 0. 0.24 0.06 0.18 0. 0.23 0.08 0.09 0. 0.09 0.17
 Dry Biomass Density: 0.14 0. 0.14 0.69 1.90 0. 2.59 0.37 2.38 0. 2.74 0.40 1.42 0. 1.42 1.82
 Plant Water Density:

Corn Field # 4 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 232.33 cm
 Top Leaf Height: 232.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COUS L123SC WHOLE
 Plant Parts:
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 4 Date: 7/ 6/82 (Julian: 187) Time: : Mean Canopy Height: 263.33 cm
 Top Leaf Height: 245.83 cm Top Cob Height: 112.83 cm Bottom Green Leaf Height: 20.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COUS L123SC WHOLE
 % Plant Moisture: 75.28 79.88 77.60 80.99 79.62 91.19 82.58 87.45 91.48 0. 90.79 81.78 86.76 91.19 87.29 85.91
 Wet Biomass Density: 0.43 0.35 0.69 0.62 1.18 0.46 2.32 0.62 2.29 0. 2.77 0.56 1.27 0.46 1.45 1.93
 Dry Biomass Density: 0.11 0.07 0.15 0.12 0.24 0.04 0.40 0.08 0.19 0. 0.25 0.10 0.17 0.04 0.18 0.27
 Plant Water Density: 0.32 0.28 0.54 0.50 0.94 1.92 0.55 2.09 2.51 0.46 1.10 1.26 1.65

Corn Field # 4 Date: 7/ 9/82 (Julian: 190) Time: 09:55 Mean Canopy Height: 287.00 cm
 Top Leaf Height: 266.67 cm Top Cob Height: 149.83 cm Bottom Green Leaf Height: 35.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COUS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 4 Date: 7/12/82 (Julian: 193) Time: : Mean Canopy Height: 305.00 cm
 Top Leaf Height: 273.00 cm Top Cob Height: 160.00 cm Bottom Green Leaf Height: 33.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COUS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 4 Date: 7/13/82 (Julian: 194) Time: : Mean Canopy Height: cm
 Top Leaf Height: cm Top Cob Height: cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 73.80 75.50 74.49 83.74 82.66 92.63 86.25 81.53 85.43 95.73 86.52 81.31 83.99 93.77 86.95 85.57
 Wet Biomass Density: 0.64 0.37 0.01
 Dry Biomass Density: 0.05 0.02 0.06
 Plant Water Density:

Corn field # 4 Date: 7/15/82 (Julian: 196) Time: 13:10 Mean Canopy Height: 297.67 cm
 Top Leaf Height: 277.17 cm Top Cob Height: 172.67 cm Bottom Green Leaf Height: 36.33 cm Leaf Layer Depth: 240.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.25 0.17 0.38 0.62 0.87 1.31 2.82 0.72 0.23 2.22 2.92 0.53 0.43 3.53 1.61 2.04
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 4 Date: 7/19/82 (Julian: 200) Time: 13:55 Mean Canopy Height: 288.33 cm
 Top Leaf Height: 257.50 cm Top Cob Height: 156.67 cm Bottom Green Leaf Height: 41.00 cm Leaf Layer Depth: 216.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.35 0.16 0.40 0.74 1.03 1.24 3.06 0.55 2.03 0.31 2.66 0.57 1.07 1.55 1.61 2.04
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 4 Date: 7/23/82 (Julian: 204) Time: 14:20 Mean Canopy Height: 289.17 cm
 Top Leaf Height: 276.67 cm Top Cob Height: 133.67 cm Bottom Green Leaf Height: 25.67 cm Leaf Layer Depth: 251.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.24 0.19 0.40 0.55 1.15 0.74 2.47 0.41 1.33 0.15 1.79 0.41 0.89 0.89 1.20 1.56
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 4 Date: 7/26/82 (Julian: 207) Time: 15:00 Mean Canopy Height: 285.00 cm
 Top Leaf Height: 267.00 cm Top Cob Height: 133.67 cm Bottom Green Leaf Height: 65.33 cm Leaf Layer Depth: 201.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.11 0.15 0.24 0.74 1.24 1.44 3.49 1.08 1.65 0.09 2.09 0.55 1.02 1.53 1.55 1.94
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 4 Date: 7/28/82 (Julian: 209) Time: : Mean Canopy Height: 292.00 cm
 Top Leaf Height: 271.50 cm Top Cob Height: 164.50 cm Bottom Green Leaf Height: 65.33 cm Leaf Layer Depth: 206.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 68.42 66.86 67.76 74.89 75.97 72.90 74.20 77.82 83.74 86.00 83.20 74.44 80.67 73.69 78.18 77.45
 Wet Biomass Density: 0.23 0.13 0.31 0.64 0.83 1.44 2.95 0.71 1.87 0.09 2.20 0.50 0.94 1.54 1.47 1.82
 Dry Biomass Density: 0.07 0.04 0.10 0.16 0.20 0.39 0.76 0.16 0.30 0.01 0.37 0.13 0.18 0.40 0.32 0.41
 Plant Water Density: 0.16 0.09 0.21 0.48 0.63 2.19 0.56 1.57 1.83 0.37 0.76 1.15 1.41

Corn field # 4 Date: 8/ 2/82 (Julian: 214) Time: 10:00 Mean Canopy Height: 302.17 cm
 Top Leaf Height: 277.00 cm Top Cob Height: 165.83 cm Bottom Green Leaf Height: 30.50 cm Leaf Layer Depth: 246.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.29 0.14 0.36 0.60 1.09 1.51 3.20 0.44 1.73 0.38 2.41 0.46 0.99 1.90 1.61 1.99
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 4 Date: 8/ 4/82 (Julian: 216) Time: 11:25 Mean Canopy Height: 299.17 cm
 Top Leaf Height: 284.83 cm Top Cob Height: 146.67 cm Bottom Green Leaf Height: 46.17 cm Leaf Layer Depth: 238.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 63.41 61.98 62.75 65.26 73.20 59.68 64.57 65.41 81.91 70.93 79.37 65.01 78.25 60.29 71.46 70.27
 Wet Biomass Density: 0.17 0.12 0.27 0.54 0.80 1.49 2.84 0.47 1.67 0.09 2.00 0.39 0.87 1.58 1.39 1.71
 Dry Biomass Density: 0.06 0.05 0.10 0.19 0.22 0.60 1.01 0.16 0.30 0.02 0.41 0.14 0.19 0.63 0.40 0.51
 Plant Water Density: 0.11 0.08 0.17 0.35 0.59 1.83 0.31 1.37 1.59 0.26 0.68 0.99 1.20

Corn Field # 4 Date: 8/ 6/82 (Julian: 218) Time: 14:50 Mean Canopy Height: 294.33 cm
 Top Leaf Height: 262.50 cm Top Cob Height: 157.00 cm Bottom Green Leaf Height: 46.17 cm Leaf Layer Depth: 216.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.32 0.15 0.37 0.71 0.94 1.92 3.60 0.47 2.25 0.14 2.63 0.53 1.12 2.05 1.81 2.20
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 4 Date: 8/ 9/82 (Julian: 221) Time: 15:10 Mean Canopy Height: 290.33 cm
 Top Leaf Height: 264.67 cm Top Cob Height: 153.33 cm Bottom Green Leaf Height: 100.67 cm Leaf Layer Depth: 164.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.32 0.13 0.36 0.56 0.79 1.60 3.01 1.82 0.03 1.89 0.49 0.91 1.63 1.48 1.75
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 4 Date: 8/16/82 (Julian: 228) Time: 13:30 Mean Canopy Height: 292.33 cm
 Top Leaf Height: 272.00 cm Top Cob Height: 153.50 cm Bottom Green Leaf Height: 117.00 cm Leaf Layer Depth: 155.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.31 0.12 0.36 0.46 0.75 1.48 2.73 0.01 0.45 1.49
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 5/21/82 (Julian: 141) Time: 11:51 Mean Canopy Height: 27.83 cm
 Top Leaf Height: 27.83 cm Top Cob Height:
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 5/24/82 (Julian: 144) Time: 13:40 Mean Canopy Height: 37.50 cm
 Top Leaf Height: 37.00 cm Top Cob Height:
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 6/ 1/82 (Julian: 152) Time: 13:41 Mean Canopy Height: 47.67 cm
 Top Leaf Height: 47.67 cm Top Cob Height:
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 6/ 2/82 (Julian: 153) Time: 13:14 Mean Canopy Height: 52.17 cm
 Top Leaf Height: 52.17 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.50
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 6/ 7/82 (Julian: 158) Time: 15:41 Mean Canopy Height: 59.00 cm
 Top Leaf Height: 59.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.25
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 6/16/82 (Julian: 167) Time: 14:10 Mean Canopy Height: 68.83 cm
 Top Leaf Height: 68.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.96
 Wet Biomass Density: 0.96 0.93 1.53 0.35 0.86 0.78 86.48 94.01 0.93 0.42 83.70 93.60 0.92 1.15 0.115 2.06
 Dry Biomass Density: 0.20 0.019 0.21 0.04 0.025 0.04 0.19 0.022 0.15 0.07 0.07 0.07 0.07 0.07 0.07 1.83
 Plant Water Density: 0.76 0.073 1.32 0.32 1.64 0.22 2.91 3.13 0.77 1.07 1.07 1.07 1.07 1.07 1.07 1.83

Corn Field # 5 Date: 6/18/82 (Julian: 169) Time: 09:25 Mean Canopy Height: 79.83 cm
 Top Leaf Height: 79.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.27 0.026 0.75 0.74 0.149 0.58 2.13 0.271 0.54 0.96 0.96 1.49
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 6/21/82 (Julian: 172) Time: 14:24 Mean Canopy Height: 96.50 cm
 Top Leaf Height: 96.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.43 0.043 0.83 1.10 0.193 0.57 1.32 0.189 0.61 0.80 0.80 1.42
 Dry Biomass Density: 0.09 0.009 0.17 0.09 0.027 0.12 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13
 Plant Water Density: 0.34 0.034 0.66 1.00 1.66 0.45 1.66 0.45 0.48 0.48 0.48 0.48 0.48 0.48 0.48

Corn Field # 5 Date: 6/25/82 (Julian: 176) Time: 14:12 Mean Canopy Height: 114.50 cm
 Top Leaf Height: 114.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.65 0.60 1.24 0.51 1.34 0.184 0.56 2.44 0.299 0.57 1.46 0.146 2.02
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 6/28/82 (Julian: 179) Time: 11:20 Mean Canopy Height: 127.50 cm
 Top Leaf Height: 127.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.25 0.13 0.38 0.66 1.47 0.212 0.81 2.94 0.374 0.57 1.51 0.151 2.08
 Dry Biomass Density: 0.02 0.02 0.16 0.10 0.026 0.15 0.26 0.15 0.26 0.15 0.26 0.15 0.26
 Plant Water Density: 0.11 0.50 0.50 1.36 1.87 0.66 1.87 0.66 1.87 0.66 1.87 0.66 1.87

Corn field # 5 Date: 6/30/82 (Julian: 181) Time: ; Mean Canopy Height: 167.33 cm
 Top Leaf Height: 167.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 167.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 5 Date: 7/ 6/82 (Julian: 187) Time: ; Mean Canopy Height: 227.67 cm
 Top Leaf Height: 212.33 cm Top Cob Height: 129.80 cm Bottom Green Leaf Height: 24.00 cm Leaf Layer Depth: 188.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 72.84 83.57 80.27 76.05 86.52 0. 83.08 79.09 88.12 0. 86.17 77.09 87.21 0. 87.21 84.56
 Wet Biomass Density: 0.17 0.30 0.43 0.48 0.99 0. 1.47 0.78 1.96 0. 2.49 0.46 1.08 0. 1.08 1.47
 Dry Biomass Density: 0.05 0.05 0.09 0.12 0.13 0. 0.25 0.16 0.23 0. 0.34 0.11 0.14 0. 0.14 0.23
 Plant Water Density: 0.12 0.25 0.35 0.37 0.85 1.22 0.62 1.72 2.15 0.36 0.94 0.94 1.24

Corn field # 5 Date: 7/ 9/82 (Julian: 190) Time: 09:50 Mean Canopy Height: 234.17 cm
 Top Leaf Height: 216.67 cm Top Cob Height: 149.67 cm Bottom Green Leaf Height: 26.00 cm Leaf Layer Depth: 190.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.30 0.32 0.55 0.39 1.48 0.15 2.06 0.67 1.65 0.15 2.29 0.44 1.15 0.31 1.28 1.63
 Dry Biomass Density:
 Plant Water Density:

Corn field # 5 Date: 7/12/82 (Julian: 193) Time: ; Mean Canopy Height: 255.00 cm
 Top Leaf Height: 229.50 cm Top Cob Height: 141.17 cm Bottom Green Leaf Height: 24.00 cm Leaf Layer Depth: 205.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.28 0.23 0.43 0.45 0.91 0.53 1.98 0.59 1.78 0.05 2.26 0.44 0.97 0.57 1.20 1.55
 Dry Biomass Density:
 Plant Water Density:

Corn field # 5 Date: 7/13/82 (Julian: 194) Time: 11:30 Mean Canopy Height: 241.33 cm
 Top Leaf Height: 222.83 cm Top Cob Height: 126.67 cm Bottom Green Leaf Height: 25.00 cm Leaf Layer Depth: 197.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 70.36 76.81 74.27 78.23 81.89 95.15 86.78 82.20 86.26 90.90 86.32 79.09 84.39 93.76 87.56 85.78
 Wet Biomass Density: 0.17 0.20 0.33 0.52 0.79 0.80 2.30 0.74 1.88 0.39 2.87 0.47 0.96 1.18 1.45 1.83
 Dry Biomass Density: 0.05 0.05 0.09 0.11 0.14 0.04 0.30 0.13 0.26 0.04 0.39 0.10 0.15 0.07 0.18 0.26
 Plant Water Density: 0.12 0.16 0.25 0.40 0.65 1.99 0.61 1.62 2.48 0.37 0.81 1.27 1.57

Corn field # 5 Date: 7/15/82 (Julian: 196) Time: 13:25 Mean Canopy Height: 226.83 cm
 Top Leaf Height: 221.00 cm Top Cob Height: 130.60 cm Bottom Green Leaf Height: 27.50 cm Leaf Layer Depth: 193.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.16 0.18 0.32 0.35 0.68 0.32 1.45 0.51 1.25 0.27 1.93 0.32 0.70 0.59 0.96 1.23
 Dry Biomass Density:
 Plant Water Density:

Corn field # 5 Date: 7/19/82 (Julian: 200) Time: ; Mean Canopy Height: 246.83 cm
 Top Leaf Height: 225.50 cm Top Cob Height: 134.67 cm Bottom Green Leaf Height: 32.50 cm Leaf Layer Depth: 193.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.18 0.15 0.29 0.47 0.67 1.18 2.58 0.77 1.77 0.26 2.55 0.46 0.87 1.43 1.45 1.80
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 5 Date: 7/23/82 (Julian: 204) Time: 14:20 Mean Canopy Height: 237.67 cm
Top Leaf Height: 216.67 cm Top Cob Height: 129.17 cm Bottom Green Leaf Height: 32.83 cm Leaf Layer Depth: 183.83 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture: 0.17 0.13 0.26 0.35 0.63 1.13 2.40 0.66 1.42 0.08 1.91 0.37 0.73 1.21 1.24 1.52
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Corn Field # 5 Date: 7/26/82 (Julian: 207) Time: 15:11 Mean Canopy Height: 248.83 cm
Top Leaf Height: 234.83 cm Top Cob Height: 103.67 cm Bottom Green Leaf Height: 17.67 cm Leaf Layer Depth: 217.17 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture: 0.16 0.14 0.28 0.36 0.70 1.84 3.28 0.64 1.83 0.26 2.64 0.38 0.89 2.10 1.74 2.07
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Corn Field # 5 Date: 7/28/82 (Julian: 209) Time: 11:40 Mean Canopy Height: 247.50 cm
Top Leaf Height: 203.00 cm Top Cob Height: 133.33 cm Bottom Green Leaf Height: 35.83 cm Leaf Layer Depth: 167.17 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture: 66.67 69.30 68.15 71.52 75.73 77.28 76.06 71.23 80.93 88.28 79.83 70.67 78.45 77.87 78.19 76.94
Wet Biomass Density: 0.23 0.14 0.24 0.35 0.60 1.22 2.43 0.41 1.15 0.07 1.47 0.34 0.63 1.29 1.15 1.38
Dry Biomass Density: 0.08 0.04 0.08 0.10 0.14 0.28 0.58 0.12 0.22 0.01 0.30 0.10 0.14 0.29 0.25 0.32
Plant Water Density: 0.15 0.09 0.16 0.25 0.45 1.85 0.29 0.93 1.17 0.24 0.49 0.90 1.06

Corn Field # 5 Date: 8/ 2/82 (Julian: 214) Time: 10:00 Mean Canopy Height: 261.17 cm
Top Leaf Height: 226.67 cm Top Cob Height: 118.33 cm Bottom Green Leaf Height: 36.17 cm Leaf Layer Depth: 190.50 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.20 0.12 0.23 0.44 0.78 1.57 3.03 0.52 1.40 0.09 1.80 0.39 0.77 1.66 1.40 1.69
Dry Biomass Density:
Plant Water Density:

Corn Field # 5 Date: 8/ 4/82 (Julian: 216) Time: 11:41 Mean Canopy Height: 261.50 cm
Top Leaf Height: 240.00 cm Top Cob Height: 127.50 cm Bottom Green Leaf Height: 18.83 cm Leaf Layer Depth: 221.17 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture: 61.58 60.89 61.28 43.90 72.17 59.10 59.77 59.26 78.34 75.99 75.00 51.81 75.45 60.57 67.79 65.09
Wet Biomass Density: 0.18 0.10 0.23 0.42 0.65 1.67 2.99 0.35 1.24 0.16 1.69 0.33 0.66 1.83 1.36 1.64
Dry Biomass Density: 0.07 0.04 0.09 0.24 0.18 0.68 1.20 0.14 0.27 0.04 0.42 0.16 0.16 0.72 0.44 0.57
Plant Water Density: 0.11 0.06 0.14 0.19 0.47 1.79 0.21 0.97 1.27 0.17 0.50 0.92 1.07

Corn Field # 5 Date: 8/ 6/82 (Julian: 218) Time: 15:00 Mean Canopy Height: 246.50 cm
Top Leaf Height: 218.50 cm Top Cob Height: 130.00 cm Bottom Green Leaf Height: 34.17 cm Leaf Layer Depth: 184.33 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.19 0.11 0.24 0.44 0.68 1.77 3.27 0.73 1.68 0.26 2.42 0.44 0.82 2.02 1.64 1.97
Dry Biomass Density:
Plant Water Density:

Corn Field # 5 Date: 8/ 9/82 (Julian: 221) Time: 15:20 Mean Canopy Height: 238.83 cm
Top Leaf Height: 209.50 cm Top Cob Height: 125.33 cm Bottom Green Leaf Height: 79.67 cm Leaf Layer Depth: 129.83 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.18 0.08 0.19 0.28 0.41 1.02 1.98 0.97 0.01 1.12 0.32 0.49 1.04 0.92 1.10
Dry Biomass Density:
Plant Water Density:

Corn Field # 5 Date: 8/16/82 (Julian: 228) Time: 13:45 Mean Canopy Height: 242.00 cm
 Top Leaf Height: 217.17 cm Top Cob Height: 127.33 cm Bottom Green Leaf Height: 52.33 cm Leaf Layer Depth: 164.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.20 0.10 0.24 0.47 0.64 1.62 3.12 0.68 1.46 0.10 1.82 0.41 0.73 1.72 1.44 1.73
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 6 Date: 5/21/82 (Julian: 141) Time: 10:50 Mean Canopy Height: 16.17 cm
 Top Leaf Height: 16.17 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 16.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.06

Corn Field # 6 Date: 5/24/82 (Julian: 144) Time: 10:31 Mean Canopy Height: 24.00 cm
 Top Leaf Height: 24.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 24.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.10

Corn Field # 6 Date: 6/ 1/82 (Julian: 152) Time: 13:24 Mean Canopy Height: 33.33 cm
 Top Leaf Height: 33.33 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 33.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.34

Corn Field # 6 Date: 6/ 2/82 (Julian: 153) Time: 12:52 Mean Canopy Height: 36.33 cm
 Top Leaf Height: 36.33 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 36.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.24

Corn Field # 6 Date: 6/ 7/82 (Julian: 158) Time: 10:26 Mean Canopy Height: 41.00 cm
 Top Leaf Height: 41.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 41.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.80

Corn Field # 6 Date: 6/ 9/82 (Julian: 160) Time: 14:24 Mean Canopy Height: 42.83 cm
 Top Leaf Height: 42.83 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 42.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 88.30
 0.62
 0.07
 0.55

Corn Field # 6 Date: 6/14/82 (Julian: 165) Time: 16:15 Mean Canopy Height: 54.00 cm
Top Leaf Height: 54.00 cm Top Cob Height: 54.00 cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 54.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture: 80.82 0. 80.82 82.11 87.94 0. 84.76 82.17 91.69 0. 89.85 81.91 90.68 0. 90.68 87.40
Wet Biomass Density: 0.21 0. 0.21 0.68 0.57 0. 1.25 0.37 1.55 0. 1.92 0.42 0.71 0. 0.71 1.13
Dry Biomass Density: 0.04 0. 0.04 0.12 0.07 0. 0.19 0.07 0.13 0. 0.20 0.08 0.07 0. 0.07 0.14
Plant Water Density: 0.17 0. 0.17 0.56 0.50 1.06 0.31 1.42 1.73 0.35 0.64 0.99

Corn Field # 6 Date: 6/16/82 (Julian: 167) Time: : Mean Canopy Height: 58.33 cm
Top Leaf Height: 58.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 58.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.54 0. 0.53 0.77 0.14 0. 0.91 0.20 1.47 0. 1.66 0.50 0.54 0. 0.54 1.04
Dry Biomass Density:
Plant Water Density:

Corn Field # 6 Date: 6/18/82 (Julian: 169) Time: : Mean Canopy Height: 60.83 cm
Top Leaf Height: 60.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 60.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.18 0.36 0.29 0. 0.66 0.58 1.34 0. 1.93 0.38 0.
Dry Biomass Density:
Plant Water Density:

Corn Field # 6 Date: 6/21/82 (Julian: 172) Time: 14:00 Mean Canopy Height: 86.67 cm
Top Leaf Height: 86.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 86.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture: 76.84 0. 76.84 80.62 88.40 0. 84.27 79.73 92.89 0. 90.65 79.64 91.92 0. 91.92 87.83
Wet Biomass Density: 0.20 0. 0.20 0.54 0.48 0. 1.01 0.35 1.71 0. 2.06 0.37 0.73 0. 0.73 1.09
Dry Biomass Density: 0.05 0. 0.05 0.10 0.06 0. 0.16 0.07 0.12 0. 0.19 0.07 0.06 0. 0.06 0.13
Plant Water Density: 0.16 0. 0.15 0.43 0.42 0.85 0.28 1.59 1.87 0.29 0.67 0.96

Corn Field # 6 Date: 6/25/82 (Julian: 176) Time: 15:15 Mean Canopy Height: 101.83 cm
Top Leaf Height: 101.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 101.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density: 0.27 0. 0.26 0.45 0.69 0. 1.14 0.29 1.75 0. 2.04 0.34 0.81 0. 0.81 1.15
Dry Biomass Density:
Plant Water Density:

Corn Field # 6 Date: 6/28/82 (Julian: 179) Time: 11:10 Mean Canopy Height: 160.83 cm
Top Leaf Height: 159.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 159.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture: 78.61 84.64 79.38 82.73 91.73 0. 88.66 93.34 0. 3.08 0.50 0.92 0. 92.69 0. 92.69
Wet Biomass Density: 0.52 0.07 0.58 0.65 1.26 0. 1.91 0.33 2.75 0. 3.08 0.50 1.36 0. 1.36 1.86
Dry Biomass Density: 0.11 0.01 0.12 0.11 0.10 0. 0.22 0.18 0. 0.10 0. 0.10 0. 0.10 0. 0.10
Plant Water Density: 0.41 0.06 0.46 0.54 1.15 1.69 2.57 1.26

Corn Field # 6 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 158.00 cm
Top Leaf Height: 150.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 150.00 cm
Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Corn Field # 6 Date: 7/ 6/82 (Julian: 187) Time: 14:01 Mean Canopy Height: 196.17 cm
 Top Leaf Height: 196.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 196.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 75.45 81.50 79.04 69.09 90.62 89.10 87.17 78.29 90.82 0. 89.09 74.10 90.11 89.10 90.01 87.39
 Wet Biomass Density: 0.19 0.27 0.46 0.34 0.30 2.34 0.35 2.19 0. 2.54 0.29 1.33 0.30 1.48 1.78
 Dry Biomass Density: 0.05 0.05 0.10 0.11 0.14 0.03 0.30 0.08 0.20 0. 0.28 0.08 0.13 0.03 0.16 0.22
 Plant Water Density: 0.14 0.22 0.36 0.24 1.39 2.04 0.27 1.99 2.26 0.22 1.20 0.34 1.55

Corn Field # 6 Date: 7/ 7/82 (Julian: 188) Time: 15:10 Mean Canopy Height: 193.33 cm
 Top Leaf Height: 183.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 183.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.40 0.21 0.54 0.38 1.25 0.27 1.59 0.35 1.02
 Wet Biomass Density: 0.40 0.21 0.54 0.38 1.25 0.27 1.59 0.35 1.02
 Dry Biomass Density: 0.40 0.21 0.54 0.38 1.25 0.27 1.59 0.35 1.02
 Plant Water Density: 0.40 0.21 0.54 0.38 1.25 0.27 1.59 0.35 1.02

Corn Field # 6 Date: 7/12/82 (Julian: 193) Time: 11:18 Mean Canopy Height: 258.33 cm
 Top Leaf Height: 234.50 cm Top Cob Height: 137.67 cm Bottom Green Leaf Height: 22.17 cm Leaf Layer Depth: 212.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.30 0.27 0.49 0.60 1.18 0.70 2.59 0.38 1.72 0.33 2.38 0.44 1.06 1.02 1.45 1.82
 Wet Biomass Density: 0.30 0.27 0.49 0.60 1.18 0.70 2.59 0.38 1.72 0.33 2.38 0.44 1.06 1.02 1.45 1.82
 Dry Biomass Density: 0.30 0.27 0.49 0.60 1.18 0.70 2.59 0.38 1.72 0.33 2.38 0.44 1.06 1.02 1.45 1.82
 Plant Water Density: 0.30 0.27 0.49 0.60 1.18 0.70 2.59 0.38 1.72 0.33 2.38 0.44 1.06 1.02 1.45 1.82

Corn Field # 6 Date: 7/13/82 (Julian: 194) Time: 10:50 Mean Canopy Height: 251.83 cm
 Top Leaf Height: 213.17 cm Top Cob Height: 142.75 cm Bottom Green Leaf Height: 23.50 cm Leaf Layer Depth: 189.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 73.49 81.45 78.42 63.87 88.04 81.08 86.17 90.03 85.90 71.36 86.45 0.41 1.00 0.60 1.24 1.55
 Wet Biomass Density: 0.26 0.23 0.37 0.47 1.03 0.38 1.94 0.46 0.23 2.35 0.12 0.14 0.12 0.14 0.14 0.14
 Dry Biomass Density: 0.07 0.04 0.08 0.17 0.12 0.09 0.24 0.02 0.33 0.30 0.30 0.30 0.30 0.30 0.30 0.30
 Plant Water Density: 0.19 0.18 0.29 0.30 0.90 0.37 1.51 2.02 0.30 0.87

Corn Field # 6 Date: 7/15/82 (Julian: 196) Time: 14:25 Mean Canopy Height: 258.00 cm
 Top Leaf Height: 241.50 cm Top Cob Height: 146.83 cm Bottom Green Leaf Height: 18.83 cm Leaf Layer Depth: 222.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.14 0.25 0.36 0.48 1.21 0.68 2.48 0.41 0.93 0.30 1.59 0.35 0.79 0.98 1.17 1.48
 Wet Biomass Density: 0.14 0.25 0.36 0.48 1.21 0.68 2.48 0.41 0.93 0.30 1.59 0.35 0.79 0.98 1.17 1.48
 Dry Biomass Density: 0.14 0.25 0.36 0.48 1.21 0.68 2.48 0.41 0.93 0.30 1.59 0.35 0.79 0.98 1.17 1.48
 Plant Water Density: 0.14 0.25 0.36 0.48 1.21 0.68 2.48 0.41 0.93 0.30 1.59 0.35 0.79 0.98 1.17 1.48

Corn Field # 6 Date: 7/19/82 (Julian: 200) Time: 14:10 Mean Canopy Height: 269.67 cm
 Top Leaf Height: 236.00 cm Top Cob Height: 146.50 cm Bottom Green Leaf Height: 25.50 cm Leaf Layer Depth: 210.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.20 0.16 0.28 0.55 0.98 1.22 2.88 0.30 1.73 0.31 2.29 0.38 0.96 1.53 1.53 1.82
 Wet Biomass Density: 0.20 0.16 0.28 0.55 0.98 1.22 2.88 0.30 1.73 0.31 2.29 0.38 0.96 1.53 1.53 1.82
 Dry Biomass Density: 0.20 0.16 0.28 0.55 0.98 1.22 2.88 0.30 1.73 0.31 2.29 0.38 0.96 1.53 1.53 1.82
 Plant Water Density: 0.20 0.16 0.28 0.55 0.98 1.22 2.88 0.30 1.73 0.31 2.29 0.38 0.96 1.53 1.53 1.82

Corn Field # 6 Date: 7/23/82 (Julian: 204) Time: 14:20 Mean Canopy Height: 259.17 cm
 Top Leaf Height: 229.50 cm Top Cob Height: 141.33 cm Bottom Green Leaf Height: 25.50 cm Leaf Layer Depth: 204.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.15 0.13 0.24 0.32 0.76 1.32 2.61 0.37 1.61 0.22 2.13 0.29 0.84 1.54 1.43 1.66
 Wet Biomass Density: 0.15 0.13 0.24 0.32 0.76 1.32 2.61 0.37 1.61 0.22 2.13 0.29 0.84 1.54 1.43 1.66
 Dry Biomass Density: 0.15 0.13 0.24 0.32 0.76 1.32 2.61 0.37 1.61 0.22 2.13 0.29 0.84 1.54 1.43 1.66
 Plant Water Density: 0.15 0.13 0.24 0.32 0.76 1.32 2.61 0.37 1.61 0.22 2.13 0.29 0.84 1.54 1.43 1.66

Corn field # 6 Date: 7/26/82 (Julian: 207) Time: 15:10 Mean Canopy Height: 280.67 cm
 Top Leaf Height: 249.00 cm Top Cob Height: 153.67 cm Bottom Green Leaf Height: 23.00 cm Leaf Layer Depth: 226.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.20 0.08 0.22 0.53 0.25 0.83 1.67 0.30 1.47 0.42 2.14 0.37 0.60 1.24 1.04 1.34
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 6 Date: 7/28/82 (Julian: 209) Time: 10:40 Mean Canopy Height: 253.83 cm
 Top Leaf Height: 211.00 cm Top Cob Height: 124.67 cm Bottom Green Leaf Height: 21.00 cm Leaf Layer Depth: 190.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 70.89 71.17 71.06 71.97 76.11 77.51 79.53 87.13 79.78 74.77 78.11 0.33 0.68 1.65 1.33 1.58
 Wet Biomass Density: 0.16 0.12 0.19 0.27 0.56 1.51 2.62 0.51 1.38 0.14 1.93 0.33 0.68 1.65 1.33 1.58
 Dry Biomass Density: 0.05 0.03 0.06 0.08 0.13 0.12 0.28 0.02 0.39 0.08 0.15 0.24 0.53
 Plant Water Density: 0.11 0.08 0.14 0.20 0.43 0.40 1.09 1.54

Corn field # 6 Date: 7/30/82 (Julian: 211) Time: 14:37 Mean Canopy Height: 266.33 cm
 Top Leaf Height: 245.50 cm Top Cob Height: 128.00 cm Bottom Green Leaf Height: 22.00 cm Leaf Layer Depth: 223.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.11 0.14 0.23 0.41 0.79 1.84 3.28 0.37 1.31 0.27 1.89 0.30 0.75 2.11 1.54 1.80
 Dry Biomass Density:
 Plant Water Density:

Corn field # 6 Date: 8/ 4/82 (Julian: 216) Time: 10:38 Mean Canopy Height: 261.33 cm
 Top Leaf Height: 235.17 cm Top Cob Height: 139.50 cm Bottom Green Leaf Height: 21.33 cm Leaf Layer Depth: 213.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 62.80 65.86 64.50 70.66 75.88 65.78 68.70 71.55 79.77 81.43 78.48 70.01 77.75 66.80 72.44 72.06
 Wet Biomass Density: 0.16 0.14 0.26 0.42 0.76 1.87 3.33 0.46 1.54 0.13 2.04 0.36 0.81 2.00 1.58 1.87
 Dry Biomass Density: 0.06 0.05 0.09 0.12 0.18 0.64 1.04 0.13 0.31 0.02 0.44 0.11 0.18 0.66 0.44 0.52
 Plant Water Density: 0.10 0.09 0.17 0.30 0.57 2.29 0.33 1.23 1.60 0.25 0.63 1.14 1.35

Corn field # 6 Date: 8/ 6/82 (Julian: 218) Time: 14:15 Mean Canopy Height: 245.50 cm
 Top Leaf Height: 222.00 cm Top Cob Height: 129.00 cm Bottom Green Leaf Height: 26.67 cm Leaf Layer Depth: 195.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 62.15
 Wet Biomass Density: 0.15 0.10 0.21 0.41 0.62 1.85 3.29 0.37 1.25 0.14 1.67 0.32 0.66 1.99 1.47 1.72
 Dry Biomass Density: 0.16
 Plant Water Density: 0.26

Corn field # 6 Date: 8/ 9/82 (Julian: 221) Time: 14:30 Mean Canopy Height: 251.67 cm
 Top Leaf Height: 230.67 cm Top Cob Height: 126.33 cm Bottom Green Leaf Height: 25.67 cm Leaf Layer Depth: 205.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.14 0.11 0.21 0.40 0.64 1.85 3.24 0.29 1.28 0.09 1.59 0.29 0.68 1.94 1.45 1.68
 Dry Biomass Density:
 Plant Water Density:

Corn field # 6 Date: 8/16/82 (Julian: 228) Time: 15:00 Mean Canopy Height: 249.17 cm
 Top Leaf Height: 226.80 cm Top Cob Height: 141.50 cm Bottom Green Leaf Height: 64.20 cm Leaf Layer Depth: 162.60 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.13 0.08 0.17 0.37 0.49 1.56 2.74 1.29 1.44 0.06 1.80 0.38 0.67 1.63 1.32 1.57
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 6 Date: 9/ 9/82 (Julian: 252) Time: 11:50 Mean Canopy Height: 245.83 cm
 Top Leaf Height: 212.50 cm Top Cob Height: 135.83 cm Bottom Green Leaf Height: 245.83 cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 17.82 37.02 25.33 31.34 68.50 33.94 39.40 7.18 74.71 36.77 70.47 23.38 72.42 33.98 52.08 49.78
 Wet Biomass Density: 0.11 0.04 0.11 0.21 0.47 1.78 2.85 1.45 0.02 1.56 0.65 1.80 1.38 1.50
 Dry Biomass Density: 0.09 0.03 0.08 0.15 0.15 1.17 1.73 0.37 0.01 0.46 0.18 1.19 0.66 0.76
 Plant Water Density: 0.02 0.02 0.03 0.07 0.32 1.12 1.08 0.37 0.01 1.10 0.47 0.72 0.75

Corn Field # 6 Date: 9/16/82 (Julian: 259) Time: 13:52 Mean Canopy Height: 220.83 cm
 Top Leaf Height: cm Top Cob Height: 125.67 cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 2.15 5.48 3.22 4.50 34.84 19.86 19.98 6.54 65.43 16.14 58.03 5.17 61.76 19.73 36.92 34.57
 Wet Biomass Density: 0.01 0.04 0.10 0.12 1.23 1.89 1.06 0.04 1.23 0.40 1.27 0.97 1.05
 Dry Biomass Density: 0.01 0.04 0.10 0.08 0.98 1.51 0.37 0.04 0.51 0.15 1.02 0.61 0.69
 Plant Water Density: 0.00 0.00 0.00 0.04 0.38 0.69 0.69 0.71 0.25 0.36 0.36

Corn Field # 7 Date: 5/19/82 (Julian: 139) Time: 15:12 Mean Canopy Height: 23.67 cm
 Top Leaf Height: 23.67 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 23.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: Wet Biomass Density: Dry Biomass Density: Plant Water Density: 0.14

Corn field # 7 Date: 5/21/82 (Julian: 141) Time: 15:46 Mean Canopy Height: 24.50 cm
 Top Leaf Height: 24.50 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 24.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: Wet Biomass Density: Dry Biomass Density: Plant Water Density: 0.20

Corn Field # 7 Date: 5/24/82 (Julian: 144) Time: 14:05 Mean Canopy Height: 30.50 cm
 Top Leaf Height: 30.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 30.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: Wet Biomass Density: Dry Biomass Density: Plant Water Density:

Corn Field # 7 Date: 5/26/82 (Julian: 146) Time: 10:38 Mean Canopy Height: 42.17 cm
 Top Leaf Height: 42.17 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 42.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: Wet Biomass Density: Dry Biomass Density: Plant Water Density: 0.23

Corn Field # 7 Date: 6/ 1/82 (Julian: 152) Time: 09:55 Mean Canopy Height: 47.17 cm
 Top Leaf Height: 47.17 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 47.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: Wet Biomass Density: Dry Biomass Density: Plant Water Density: 0.61

Corn Field # 7 Date: 6/ 2/82 (Julian: 153) Time: 15:00 Mean Canopy Height: 44.83 cm
 Top Leaf Height: 44.83 cm Top Cob Height: 0. cm Leaf Layer Depth: 44.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.22
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 6/ 4/82 (Julian: 155) Time: 09:35 Mean Canopy Height: 50.00 cm
 Top Leaf Height: 50.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 50.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.55
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 6/ 7/82 (Julian: 158) Time: 14:04 Mean Canopy Height: 42.50 cm
 Top Leaf Height: 42.50 cm Top Cob Height: 0. cm Leaf Layer Depth: 42.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.79
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 6/16/82 (Julian: 167) Time: 15:34 Mean Canopy Height: 77.00 cm
 Top Leaf Height: 77.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 77.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 91.59 0. 81.09 81.48 91.59 0. 87.01 83.64 94.67 0. 93.46 81.67 93.63 0. 93.63 89.42
 Wet Biomass Density: 0.49 0. 0.49 0.74 0.89 0. 1.63 0.22 1.76 0. 1.98 0.48 0.88 0. 0.88 1.37
 Dry Biomass Density: 0.09 0. 0.09 0.14 0.07 0. 0.21 0.04 0.09 0. 0.13 0.09 0.06 0. 0.06 0.14
 Plant Water Density: 0.40 0. 0.40 0.60 0.81 1.41 0.18 1.67 1.85 0.39 0.83 0.83 1.22

Corn Field # 7 Date: 6/21/82 (Julian: 172) Time: 10:50 Mean Canopy Height: 96.83 cm
 Top Leaf Height: 96.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 96.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 82.23 0. 82.23 83.92 0.68 0. 1.24 0.18 1.46 0. 92.34 83.20 0. 0.71 1.06
 Wet Biomass Density: 0.32 0. 0.32 0.56 0.06 0. 0.03 0.09 0. 0.13 0.06 0.06 0.
 Dry Biomass Density: 0.06 0. 0.06 0.09 0.26 0.47 0.15 1.36 1.51 0.30

Corn Field # 7 Date: 6/25/82 (Julian: 176) Time: 09:55 Mean Canopy Height: 123.50 cm
 Top Leaf Height: 122.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 122.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.50 0. 0.48 0.54 1.00 0. 1.54 0.26 1.74 0. 2.00 0.43 0.91 0. 0.91 1.34
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 6/28/82 (Julian: 179) Time: 14:50 Mean Canopy Height: 157.83 cm
 Top Leaf Height: 157.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 157.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.45 0. 0.44 0.45 1.14 0. 1.59 0.30 1.81 0. 2.11 0.40 0.98 0. 0.98 1.38
 Dry Biomass Density:
 Plant Water Density:

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Corn Field # 7 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 183.50 cm
 Top Leaf Height: 183.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 183.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 7/ 7/82 (Julian: 188) Time: 10:00 Mean Canopy Height: 198.33 cm
 Top Leaf Height: 184.50 cm Top Cob Height: 118.00 cm Bottom Green Leaf Height: 22.50 cm Leaf Layer Depth: 162.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 74.73 82.35 79.01 82.31 86.92 92.78 88.00 80.45 90.16 0. 88.44 79.75 88.33 92.78 89.16 87.05
 Wet Biomass Density: 0.29 0.29 0.52 0.36 0.75 0.39 1.70 0.50 1.54 0. 1.87 0.37 0.86 0.39 1.06 1.36
 Dry Biomass Density: 0.07 0.05 0.11 0.06 0.10 0.03 0.20 0.10 0.15 0. 0.22 0.08 0.10 0.03 0.11 0.18
 Plant Water Density: 0.22 0.24 0.41 0.29 0.65 1.50 0.40 1.39 1.65 0.30 0.76 0.94 1.19

Corn Field # 7 Date: 7/ 9/82 (Julian: 190) Time: 11:40 Mean Canopy Height: 210.50 cm
 Top Leaf Height: 193.20 cm Top Cob Height: 132.80 cm Bottom Green Leaf Height: 26.00 cm Leaf Layer Depth: 167.20 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.21 0.18 0.34 0.37 0.93 0.39 1.85 0.55 1.55 0.20 2.18 0.36 0.89 0.59 1.17 1.46
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 7/12/82 (Julian: 193) Time: 14:37 Mean Canopy Height: 232.33 cm
 Top Leaf Height: 199.83 cm Top Cob Height: 135.17 cm Bottom Green Leaf Height: 32.00 cm Leaf Layer Depth: 167.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 71.16 80.34 76.14 81.87 80.23 91.94 86.09 84.46 82.96
 Wet Biomass Density: 0.24 0.17 0.30 0.56 0.70 0.86 2.37 0.48 1.56 0.45 2.43 0.46 0.81 1.31 1.38 1.70
 Dry Biomass Density: 0.07 0.03 0.07 0.10 0.14 0.07 0.33 0.24 0.14
 Plant Water Density: 0.17 0.13 0.23 0.46 0.56 2.04 1.32 0.67

Corn Field # 7 Date: 7/13/82 (Julian: 194) Time: 14:22 Mean Canopy Height: 231.17 cm
 Top Leaf Height: 192.17 cm Top Cob Height: 130.33 cm Bottom Green Leaf Height: 27.00 cm Leaf Layer Depth: 165.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.29 0.14 0.28 0.40 0.82 1.01 2.54 0.58 1.62 0.27 2.34 0.43 0.86 1.28 1.41 1.72
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 7/15/82 (Julian: 196) Time: 09:42 Mean Canopy Height: 221.00 cm
 Top Leaf Height: 193.33 cm Top Cob Height: 127.50 cm Bottom Green Leaf Height: 24.83 cm Leaf Layer Depth: 168.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.28 0.08 0.25 0.46 0.99 0.88 2.63 0.37 1.11 0.42 1.93 0.39 0.72 1.29 1.31 1.60
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 7/23/82 (Julian: 204) Time: 09:45 Mean Canopy Height: 234.67 cm
 Top Leaf Height: 180.33 cm Top Cob Height: 132.17 cm Bottom Green Leaf Height: 27.17 cm Leaf Layer Depth: 153.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 70.68 74.12 72.43 75.90 78.80 81.05 79.78 78.11 83.85 90.47 83.43 76.06 81.91 81.90 81.91 80.88
 Wet Biomass Density: 0.38 0.12 0.24 0.40 0.60 1.30 2.66 0.51 1.44 0.13 1.94 0.43 0.72 1.43 1.33 1.61
 Dry Biomass Density: 0.11 0.03 0.07 0.10 0.13 0.25 0.54 0.11 0.23 0.01 0.32 0.10 0.13 0.26 0.24 0.31
 Plant Water Density: 0.27 0.09 0.17 0.30 0.47 2.12 0.40 1.21 1.62 0.33 0.59 1.09 1.31

Corn Field # 7 Date: 7/26/82 (Julian: 207) Time: 11:05 Mean Canopy Height: 232.33 cm
 Top Leaf Height: 197.83 cm Top Cob Height: 124.00 cm Bottom Green Leaf Height: 28.67 cm Leaf Layer Depth: 169.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 70.41 73.30 71.95 79.79 79.90 77.00 82.43 95.53 82.22 81.16 80.69 80.94
 Wet Biomass Density: 0.18 0.11 0.21 0.36 0.64 1.34 2.73 0.46 1.39 0.07 1.77 0.34 0.71 1.41 1.32 1.57
 Dry Biomass Density: 0.05 0.03 0.06 0.13 0.27 0.10 0.24 0.00 0.31 0.13 0.27 0.25
 Plant Water Density: 0.12 0.08 0.15 0.51 0.35 1.14 1.45 0.58 1.07

Corn Field # 7 Date: 7/28/82 (Julian: 209) Time: 14:15 Mean Canopy Height: 226.33 cm
 Top Leaf Height: 187.17 cm Top Cob Height: 131.67 cm Bottom Green Leaf Height: 31.00 cm Leaf Layer Depth: 156.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.23 0.12 0.23 0.32 0.67 1.46 2.93 0.64 1.43 0.23 2.10 0.39 0.74 1.68 1.48 1.75
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 7/30/82 (Julian: 211) Time: 09:50 Mean Canopy Height: 231.17 cm
 Top Leaf Height: 196.50 cm Top Cob Height: 131.83 cm Bottom Green Leaf Height: 32.83 cm Leaf Layer Depth: 163.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.18 0.10 0.20 0.50 0.63 1.57 3.16 0.90 1.50 0.53 2.71 0.52 0.75 2.10 1.65 2.03
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 8/ 2/82 (Julian: 214) Time: 10:53 Mean Canopy Height: 242.33 cm
 Top Leaf Height: 205.67 cm Top Cob Height: 140.17 cm Bottom Green Leaf Height: 31.83 cm Leaf Layer Depth: 173.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 66.07 69.68 67.62 71.58 75.43 68.25 70.42 77.28 79.16 81.51 79.21 72.91 77.48 70.16 73.83 73.68
 Wet Biomass Density: 0.31 0.13 0.29 0.47 0.85 1.78 3.53 0.67 1.62 0.30 2.40 0.48 0.87 2.08 1.73 2.07
 Dry Biomass Density: 0.10 0.04 0.09 0.13 0.21 0.57 1.04 0.15 0.34 0.06 0.50 0.13 0.20 0.62 0.45 0.55
 Plant Water Density: 0.20 0.09 0.20 0.34 0.64 2.49 0.52 1.28 1.90 0.35 0.67 1.27 1.53

Corn Field # 7 Date: 8/ 4/82 (Julian: 216) Time: 14:48 Mean Canopy Height: 243.17 cm
 Top Leaf Height: 217.00 cm Top Cob Height: 124.00 cm Bottom Green Leaf Height: 22.00 cm Leaf Layer Depth: 195.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.20 0.14 0.27 0.56 0.71 1.70 3.37 0.37 1.24 0.68 2.35 0.40 0.70 2.39 1.68 2.00
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 7 Date: 8/ 9/82 (Julian: 221) Time: 10:00 Mean Canopy Height: 230.33 cm
 Top Leaf Height: 183.33 cm Top Cob Height: 138.50 cm Bottom Green Leaf Height: 32.50 cm Leaf Layer Depth: 150.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 63.87 71.97 67.98 71.82 78.76 55.98 62.62 75.06 81.53 84.89 81.21 71.32 79.91 59.70 68.94 69.29
 Wet Biomass Density: 0.41 0.17 0.33 0.39 0.70 1.72 3.34 0.46 1.31 0.25 1.90 0.42 0.72 1.98 1.58 1.86
 Dry Biomass Density: 0.15 0.05 0.10 0.11 0.15 0.76 1.25 0.11 0.24 0.04 0.36 0.12 0.15 0.80 0.49 0.57
 Plant Water Density: 0.26 0.12 0.22 0.28 0.55 2.09 0.35 1.07 1.55 0.30 0.58 1.09 1.29

Corn Field # 7 Date: 8/18/82 (Julian: 230) Time: 12:48 Mean Canopy Height: 222.67 cm
 Top Leaf Height: 194.17 cm Top Cob Height: 129.00 cm Bottom Green Leaf Height: 42.33 cm Leaf Layer Depth: 151.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 64.79 70.25 66.81 72.68 76.87 45.81 55.33 69.89 79.76 81.68 78.42 70.34 78.46 48.33 62.36 63.72
 Wet Biomass Density: 0.28 0.10 0.27 0.46 0.60 1.63 3.26 0.64 1.36 0.12 1.81 0.45 0.69 1.76 1.48 1.78
 Dry Biomass Density: 0.10 0.03 0.09 0.13 0.14 0.88 1.46 0.19 0.28 0.02 0.39 0.13 0.15 0.91 0.56 0.65
 Plant Water Density: 0.18 0.07 0.18 0.34 0.46 1.80 0.45 1.09 1.42 0.31 0.54 0.92 1.13

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Corn Field # 7 Date: 9/ 2/82 (Julian: 245) Time: : Mean Canopy Height: 225.17 cm
 Top Leaf Height: 201.33 cm Top Cob Height: 129.17 cm Bottom Green Leaf Height: 85.50 cm Leaf Layer Depth: 115.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 50.43 58.39 53.14 56.13 74.68 36.71 45.27 46.70 78.06 43.13 71.27 54.06 76.46 37.45 54.14 54.13
 Wet Biomass Density: 0.16 0.06 0.17 0.27 0.51 1.57 2.86 1.20 0.20 1.49 0.26 0.59 1.77 1.37 1.51
 Dry Biomass Density: 0.08 0.02 0.08 0.12 0.13 0.99 1.57 0.26 0.12 0.43 0.12 0.14 1.11 0.63 0.69
 Plant Water Density: 0.08 0.03 0.09 0.15 0.38 1.30 0.94 0.14 0.45 0.14 0.74 0.82

Corn Field # 8 Date: 5/19/82 (Julian: 139) Time: 15:10 Mean Canopy Height: 21.50 cm
 Top Leaf Height: 21.50 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 21.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.13

Corn Field # 8 Date: 5/21/82 (Julian: 141) Time: 15:50 Mean Canopy Height: 40.33 cm
 Top Leaf Height: 40.33 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 40.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.04

Corn Field # 8 Date: 5/24/82 (Julian: 144) Time: 14:07 Mean Canopy Height: 31.00 cm
 Top Leaf Height: 31.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 31.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 5/26/82 (Julian: 146) Time: 10:37 Mean Canopy Height: 32.33 cm
 Top Leaf Height: 32.33 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 32.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.47

Corn Field # 8 Date: 6/ 1/82 (Julian: 152) Time: 09:55 Mean Canopy Height: 43.00 cm
 Top Leaf Height: 43.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 43.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.35

Corn Field # 8 Date: 6/ 2/82 (Julian: 153) Time: 15:01 Mean Canopy Height: 46.17 cm
 Top Leaf Height: 46.17 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 46.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.26

Corn Field # 8 Date: 6/ 4/82 (Julian: 155) Time: 09:40 Mean Canopy Height: 57.33 cm
 Top Leaf Height: 57.33 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 57.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.71
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 6/ 7/82 (Julian: 158) Time: 14:02 Mean Canopy Height: 57.00 cm
 Top Leaf Height: 57.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 57.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.13
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 6/16/82 (Julian: 167) Time: 15:30 Mean Canopy Height: 85.17 cm
 Top Leaf Height: 85.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 85.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 79.13 0. 79.13 86.00 91.47 0. 87.16 86.73 94.71 0. 93.89 83.83 94.30 0. 94.30 89.47
 Wet Biomass Density: 0.64 0. 0.63 1.07 0.29 0. 1.36 0.22 1.97 0. 2.20 0.65 0.75 0. 0.75 1.40
 Dry Biomass Density: 0.13 0. 0.13 0.15 0.02 0. 0.17 0.03 0.10 0. 0.13 0.10 0.04 0. 0.04 0.15
 Plant Water Density: 0.50 0. 0.50 0.92 0.26 0. 1.19 0.19 1.87 0. 2.06 0.54 0.71 0. 0.71 1.25

Corn Field # 8 Date: 6/21/82 (Julian: 172) Time: 11:00 Mean Canopy Height: 111.00 cm
 Top Leaf Height: 108.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 108.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 83.20 90.03 84.38 83.42 94.69 0. 90.09 84.41 94.04 0. 92.65 83.58 94.16 0. 94.16 90.74
 Wet Biomass Density: 0.54 0.10 0.60 0.94 1.36 0. 2.30 0.40 2.38 0. 2.79 0.63 1.28 0. 1.28 1.89
 Dry Biomass Density: 0.09 0.01 0.09 0.16 0.07 0. 0.23 0.06 0.14 0. 0.20 0.10 0.07 0. 0.07 0.18
 Plant Water Density: 0.45 0.09 0.51 0.78 1.29 0. 2.07 0.34 2.24 0. 2.58 0.53 1.21 0. 1.21 1.72

Corn Field # 8 Date: 6/25/82 (Julian: 176) Time: 10:30 Mean Canopy Height: 131.33 cm
 Top Leaf Height: 130.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 130.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.52 0.30 0.81 0.83 1.58 0. 2.41 0.54 2.60 0. 3.14 0.63 1.49 0. 1.49 2.12
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 6/28/82 (Julian: 179) Time: 14:45 Mean Canopy Height: 168.17 cm
 Top Leaf Height: 168.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 168.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.94 0.53 1.61 0. 2.14 0.44 2.28 0. 2.72 0.64 0.
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 185.33 cm
 Top Leaf Height: 179.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 179.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 7/ 7/82 (Julian: 188) Time: 10:00 Mean Canopy Height: 232.83 cm
 Top Leaf Height: 214.17 cm Top Cob Height: 126.50 cm Bottom Green Leaf Height: 25.00 cm Leaf Layer Depth: 189.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 76.79 78.74 77.79 81.29 87.33 92.73 87.23 80.64 87.26 89.12 86.11 80.23 86.64 91.90 87.64 85.82
 Wet Biomass Density: 0.30 0.24 0.46 0.54 0.98 0.44 2.10 0.74 1.95 0.13 2.63 0.52 1.06 0.58 1.30 1.73
 Dry Biomass Density: 0.07 0.05 0.10 0.10 0.12 0.03 0.27 0.14 0.25 0.01 0.36 0.10 0.14 0.05 0.16 0.25
 Plant Water Density: 0.23 0.19 0.36 0.44 0.86 1.83 0.60 1.70 2.26 0.42 0.92 1.14 1.48

Corn Field # 8 Date: 7/ 9/82 (Julian: 190) Time: 11:20 Mean Canopy Height: 240.50 cm
 Top Leaf Height: 218.00 cm Top Cob Height: 136.00 cm Bottom Green Leaf Height: 30.50 cm Leaf Layer Depth: 187.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.34 0.22 0.46 0.61 1.04 0.51 2.29 0.97 1.95 0.29 2.91 0.62 1.07 0.80 1.40 1.89
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 7/12/82 (Julian: 193) Time: 14:25 Mean Canopy Height: 239.67 cm
 Top Leaf Height: 214.33 cm Top Cob Height: 136.50 cm Bottom Green Leaf Height: 28.17 cm Leaf Layer Depth: 186.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.28 0.15 0.34 0.60 0.84 0.94 2.61 0.65 1.77 0.56 2.89 0.52 0.92 1.50 1.54 1.95
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 7/13/82 (Julian: 194) Time: 14:36 Mean Canopy Height: 229.67 cm
 Top Leaf Height: 197.33 cm Top Cob Height: 132.00 cm Bottom Green Leaf Height: 28.50 cm Leaf Layer Depth: 168.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.26 0.14 0.28 0.53 0.65 0.81 2.23 0.95 1.77 0.35 2.83 0.58 0.85 1.16 1.36 1.78
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 7/15/82 (Julian: 196) Time: 09:43 Mean Canopy Height: 249.67 cm
 Top Leaf Height: 210.83 cm Top Cob Height: 134.33 cm Bottom Green Leaf Height: 28.67 cm Leaf Layer Depth: 182.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.25 0.15 0.28 0.67 0.82 1.38 3.14 0.73 2.04 0.34 2.94 0.58 1.00 1.73 1.70 2.12
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 7/23/82 (Julian: 204) Time: 09:45 Mean Canopy Height: 258.67 cm
 Top Leaf Height: 220.83 cm Top Cob Height: 142.00 cm Bottom Green Leaf Height: 27.83 cm Leaf Layer Depth: 193.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 72.47 71.07 71.78 75.38 84.06 78.91 80.12 89.37 82.18 76.36 85.46
 Wet Biomass Density: 0.24 0.13 0.27 0.56 0.79 1.72 3.35 0.63 1.83 0.62 2.97 0.50 0.92 2.34 1.82 2.20
 Dry Biomass Density: 0.07 0.04 0.08 0.14 0.28 0.13 0.36 0.07 0.53 0.12 0.34
 Plant Water Density: 0.18 0.09 0.19 0.42 0.49 1.46 2.44 0.38

Corn Field # 8 Date: 7/26/82 (Julian: 207) Time: 11:05 Mean Canopy Height: 260.33 cm
 Top Leaf Height: 222.83 cm Top Cob Height: 139.33 cm Bottom Green Leaf Height: 30.17 cm Leaf Layer Depth: 192.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 69.09 69.58 69.30 73.33 70.44 78.70 80.77 88.04 81.67 74.35 77.13
 Wet Biomass Density: 0.30 0.13 0.30 0.66 0.70 1.96 3.62 0.55 1.56 0.34 2.31 0.53 0.80 2.30 1.68 2.08
 Dry Biomass Density: 0.09 0.04 0.09 0.18 0.21 0.12 0.30 0.04 0.42 0.14 0.18
 Plant Water Density: 0.21 0.09 0.21 0.48 0.50 0.43 1.26 1.89 0.40 0.62

Corn field # 8 Date: 7/28/82 (Julian: 209) Time: 14:15 Mean Canopy Height: 246.17 cm
 Top Leaf Height: 213.17 cm Top Cob Height: 130.00 cm Bottom Green Leaf Height: 30.00 cm Leaf Layer Depth: 183.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.25 0.15 0.30 0.55 0.95 1.82 3.72 0.54 1.52 0.69 2.70 0.47 0.88 2.51 1.89 2.24
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 8 Date: 7/30/82 (Julian: 211) Time: 09:50 Mean Canopy Height: 244.17 cm
 Top Leaf Height: 209.33 cm Top Cob Height: 131.00 cm Bottom Green Leaf Height: 29.83 cm Leaf Layer Depth: 179.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.26 0.15 0.30 0.48 0.76 2.03 3.73 0.53 1.37 0.30 2.07 0.44 0.76 2.33 1.71 2.04
 Dry Biomass Density:
 Plant Water Density:

Corn field # 8 Date: 8/ 2/82 (Julian: 214) Time: : Mean Canopy Height: 243.00 cm
 Top Leaf Height: 230.17 cm Top Cob Height: 134.83 cm Bottom Green Leaf Height: 28.50 cm Leaf Layer Depth: 201.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 66.31 69.78 68.01 72.78 78.28 54.12 63.23 74.94 77.92 76.66 77.07 72.77 77.40 58.52 68.91 69.77
 Wet Biomass Density: 0.20 0.16 0.33 0.45 0.56 1.13 2.41 0.77 1.40 0.27 2.24 0.45 0.71 1.41 1.29 1.66
 Dry Biomass Density: 0.07 0.05 0.11 0.12 0.12 0.52 0.89 0.19 0.31 0.06 0.51 0.12 0.16 0.58 0.40 0.50
 Plant Water Density: 0.13 0.11 0.22 0.32 0.44 1.52 0.57 1.09 1.73 0.32 0.55 0.32 0.55 0.89 1.16

Corn field # 8 Date: 8/ 4/82 (Julian: 216) Time: 15:06 Mean Canopy Height: 243.67 cm
 Top Leaf Height: 214.67 cm Top Cob Height: 137.17 cm Bottom Green Leaf Height: 28.00 cm Leaf Layer Depth: 186.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.28 0.13 0.31 0.59 0.73 1.98 3.75 0.62 1.46 1.53 3.75 0.51 0.77 3.51 2.21 2.61
 Dry Biomass Density:
 Plant Water Density:

Corn field # 8 Date: 8/ 9/82 (Julian: 221) Time: 10:20 Mean Canopy Height: 244.50 cm
 Top Leaf Height: 212.50 cm Top Cob Height: 141.67 cm Bottom Green Leaf Height: 31.83 cm Leaf Layer Depth: 180.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 66.88 67.34 67.05 73.61 76.51 60.94 65.95 77.24 79.49 80.24 79.25 73.12 77.74 62.67 69.23 69.95
 Wet Biomass Density: 0.42 0.14 0.39 0.71 0.83 2.30 4.35 0.49 1.42 0.23 2.00 0.57 0.80 2.53 1.83 2.25
 Dry Biomass Density: 0.14 0.05 0.13 0.19 0.19 0.90 1.48 0.11 0.29 0.04 0.41 0.15 0.18 0.94 0.56 0.68
 Plant Water Density: 0.28 0.10 0.26 0.52 0.63 2.87 0.38 1.13 1.58 0.42 0.62 0.42 0.62 1.27 1.27 1.57

Corn field # 8 Date: 8/18/82 (Julian: 230) Time: 13:08 Mean Canopy Height: 245.33 cm
 Top Leaf Height: 220.67 cm Top Cob Height: 144.00 cm Bottom Green Leaf Height: 38.17 cm Leaf Layer Depth: 182.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 65.40 67.59 66.34 72.17 80.21 41.51 58.87 73.67 81.23 57.24 73.31 71.27 80.05 46.49 63.98 65.32
 Wet Biomass Density: 0.31 0.16 0.37 0.67 0.95 1.38 3.31 0.51 1.57 0.64 2.63 0.52 0.90 2.02 1.72 2.10
 Dry Biomass Density: 0.11 0.05 0.13 0.19 0.19 0.81 1.36 0.13 0.30 0.27 0.70 0.15 0.18 1.08 0.62 0.73
 Plant Water Density: 0.20 0.11 0.25 0.49 0.76 1.95 0.38 1.28 1.93 0.37 0.72 0.37 0.72 1.10 1.10 1.37

Corn field # 8 Date: 8/31/82 (Julian: 243) Time: 10:45 Mean Canopy Height: 250.67 cm
 Top Leaf Height: cm Top Cob Height: cm Bottom Green Leaf Height: 250.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 8 Date: 9/ 2/82 (Julian: 245) Time: 16:00 Mean Canopy Height: 234.83 cm
 Top Leaf Height: 207.50 cm Top Cob Height: 123.83 cm Bottom Green Leaf Height: 82.83 cm Leaf Layer Depth: 124.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 36.05 45.95 39.79 55.22 72.09 34.84 43.21 47.00 76.23 57.24 68.28 50.69 74.16 40.65 53.22 52.99
 Wet Biomass Density: 0.14 0.06 0.15 0.35 0.53 1.82 3.21 1.30 0.64 2.18 0.32 0.63 2.46 1.68 1.85
 Dry Biomass Density: 0.09 0.03 0.09 0.16 0.15 1.19 1.82 0.31 0.27 0.69 0.16 0.16 1.46 0.79 0.87
 Plant Water Density: 0.05 0.03 0.06 0.19 0.38 1.39 0.99 1.49 0.16 0.47 0.89 0.98

Corn field # 9 Date: 5/19/82 (Julian: 139) Time: 15:35 Mean Canopy Height: 28.67 cm
 Top Leaf Height: 28.67 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.06

Corn Field # 9 Date: 5/21/82 (Julian: 141) Time: 15:49 Mean Canopy Height: 24.83 cm
 Top Leaf Height: 24.83 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.06

Corn Field # 9 Date: 5/24/82 (Julian: 144) Time: 14:14 Mean Canopy Height: 32.00 cm
 Top Leaf Height: 32.00 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 9 Date: 5/26/82 (Julian: 146) Time: 10:58 Mean Canopy Height: 32.67 cm
 Top Leaf Height: 32.67 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.28

Corn Field # 9 Date: 6/ 1/82 (Julian: 152) Time: 10:16 Mean Canopy Height: 48.50 cm
 Top Leaf Height: 48.50 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.62

Corn Field # 9 Date: 6/ 2/82 (Julian: 153) Time: 15:19 Mean Canopy Height: 50.67 cm
 Top Leaf Height: 50.67 cm Top Cob Height: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density: 0.33

Corn Field # 9 Date: 6/ 4/82 (Julian: 155) Time: 10:04 Mean Canopy Height: 47.17 cm
 Top Leaf Height: 47.17 cm Top Cob Height: 0. cm Leaf Layer Depth: 47.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.46
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 9 Date: 6/ 7/82 (Julian: 158) Time: 14:21 Mean Canopy Height: 55.00 cm
 Top Leaf Height: 55.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 55.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.06
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 9 Date: 6/14/82 (Julian: 165) Time: 10:40 Mean Canopy Height: 80.17 cm
 Top Leaf Height: 80.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 80.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 83.86 0. 83.86 93.46 85.22 0. 89.25 95.06 84.83 0. 93.87 92.52 85.13 0. 85.13 90.06
 Wet Biomass Density: 0.76 0. 0.75 1.00 1.04 0. 2.04 2.20 0.29 0. 2.49 1.32 0.44 0. 0.44 1.76
 Dry Biomass Density: 0.12 0. 0.12 0.07 0.15 0. 0.22 0.11 0.04 0. 0.15 0.10 0.07 0. 0.07 0.16
 Plant Water Density: 0.63 0. 0.63 0.93 0.89 0. 1.82 2.09 0.24 2.33 1.22 0.38 0.38 1.59

Corn Field # 9 Date: 6/16/82 (Julian: 167) Time: 14:52 Mean Canopy Height: 85.83 cm
 Top Leaf Height: 81.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 81.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.29 0. 0.24 0.29 0.40 0. 0.69 0.50 1.38 0. 1.88 0.36 0.59 0. 0.59 0.93
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 9 Date: 6/21/82 (Julian: 172) Time: 11:16 Mean Canopy Height: 103.33 cm
 Top Leaf Height: 102.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 102.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 81.55 92.34 84.14 82.50 93.37 0. 89.18 80.31 93.88 0. 91.93 81.68 93.64 0. 93.64 89.90
 Wet Biomass Density: 0.52 0.16 0.66 0.67 1.06 0. 1.73 0.36 2.12 0. 2.48 0.51 1.11 0. 1.11 1.62
 Dry Biomass Density: 0.10 0.01 0.10 0.12 0.07 0. 0.19 0.07 0.13 0. 0.20 0.09 0.07 0. 0.07 0.16
 Plant Water Density: 0.42 0.14 0.55 0.55 0.99 1.54 0.29 1.99 2.28 0.42 1.04 1.04 1.46

Corn Field # 9 Date: 6/25/82 (Julian: 176) Time: 10:10 Mean Canopy Height: 129.00 cm
 Top Leaf Height: 129.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 129.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.51 0.68 1.04 0. 1.72 0.43 2.11 0. 2.54 0.54 0.
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 9 Date: 6/28/82 (Julian: 179) Time: 13:00 Mean Canopy Height: 148.33 cm
 Top Leaf Height: 129.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 129.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.52 0.24 0.56 0.34 0.82 0. 1.16 0.47 1.72 0. 2.20 0.43 0.93 0. 0.93 1.30
 Dry Biomass Density:
 Plant Water Density:

Corn field # 9 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 180.67 cm
 Top Leaf Height: 171.00 cm Top Cob Height: L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field # 9 Date: 7/ 2/82 (Julian: 183) Time: 10:33 Mean Canopy Height: 197.33 cm
 Top Leaf Height: 181.00 cm Top Cob Height: L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.50 0.25 0.62 0.32 1.07 0. 1.40 0.34 1.63 0. 1.97 0.38 0.98 0. 0.98 1.33
 Dry Biomass Density:
 Plant Water Density:

Corn field # 9 Date: 7/ 7/82 (Julian: 188) Time: 11:35 Mean Canopy Height: 227.50 cm
 Top Leaf Height: 215.25 cm Top Cob Height: 142.00 cm Bottom Green Leaf Height: 25.00 cm Leaf Layer Depth: 190.25 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 72.62 81.13 77.16 76.62 77.40 91.86 80.83 71.38 0. 74.28 91.86
 Dry Biomass Density: 0.23 0.22 0.41 0.51 0.82 0.34 1.77 0.45 1.61 0. 0.40 0.88 0.34 1.03 1.36
 Plant Water Density: 0.06 0.04 0.09 0.12 0.18 0.03 0.34 0.13 0. 0.10 0.03
 Plant Water Density: 0.17 0.18 0.32 0.39 0.63 1.43 0.32 0.30

Corn field # 9 Date: 7/ 9/82 (Julian: 190) Time: 15:21 Mean Canopy Height: 237.00 cm
 Top Leaf Height: 215.17 cm Top Cob Height: 150.83 cm Bottom Green Leaf Height: 19.00 cm Leaf Layer Depth: 196.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.35 0.21 0.47 0.59 1.28 0.43 2.41 0.47 1.81 0.34 2.60 0.48 1.10 0.76 1.43 1.83
 Dry Biomass Density:
 Plant Water Density:

Corn field # 9 Date: 7/12/82 (Julian: 193) Time: 15:14 Mean Canopy Height: 221.33 cm
 Top Leaf Height: 196.33 cm Top Cob Height: 130.67 cm Bottom Green Leaf Height: 28.00 cm Leaf Layer Depth: 168.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.16 0.13 0.24 0.42 0.74 0.33 1.61 0.42 1.28 0.17 1.77 0.35 0.72 0.50 0.94 1.21
 Dry Biomass Density:
 Plant Water Density:

Corn field # 9 Date: 7/13/82 (Julian: 194) Time: 15:30 Mean Canopy Height: 231.17 cm
 Top Leaf Height: 216.50 cm Top Cob Height: 140.75 cm Bottom Green Leaf Height: 30.75 cm Leaf Layer Depth: 185.75 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.26 0.19 0.40 0.62 0.87 0.68 2.37 0.55 1.60 0.32 2.35 0.48 0.89 1.00 1.32 1.70
 Dry Biomass Density:
 Plant Water Density:

Corn field # 9 Date: 7/15/82 (Julian: 196) Time: 10:19 Mean Canopy Height: 228.83 cm
 Top Leaf Height: 203.00 cm Top Cob Height: 125.33 cm Bottom Green Leaf Height: 23.17 cm Leaf Layer Depth: 179.83 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.20 0.14 0.27 0.48 0.78 0.79 2.29 0.67 1.64 0.38 2.61 0.45 0.86 1.17 1.37 1.72
 Dry Biomass Density:
 Plant Water Density:

Corn Field # 9 Date: 7/23/82 (Julian: 204) Time: 10:10 Mean Canopy Height: 232.67 cm
 Top Leaf Height: 190.17 cm Top Cob Height: 133.67 cm Bottom Green Leaf Height: 28.83 cm Leaf Layer Depth: 161.33 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 68.98 71.81 70.37 77.71 78.05 75.05 76.95 74.52 81.08 95.46 87.71 75.40 79.54 89.82 84.63 83.13
 Wet Biomass Density: 0.33 0.14 0.29 0.50 0.75 0.49 1.89 0.40 1.44 1.29 3.35 0.43 0.78 1.78 1.54 1.84
 Dry Biomass Density: 0.10 0.04 0.09 0.11 0.17 0.12 0.44 0.10 0.27 0.06 0.41 0.11 0.16 0.18 0.24 0.31
 Plant Water Density: 0.22 0.10 0.20 0.39 0.59 1.45 0.30 1.17 2.94 0.33 0.62 1.31 1.53

Corn Field # 9 Date: 7/26/82 (Julian: 207) Time: 11:30 Mean Canopy Height: 251.50 cm
 Top Leaf Height: 217.00 cm Top Cob Height: 138.17 cm Bottom Green Leaf Height: 24.83 cm Leaf Layer Depth: 192.17 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 67.68 70.99 69.35 77.94 76.32 76.52 82.16 86.93 82.65 80.25 79.13 79.65
 Wet Biomass Density: 0.25 0.15 0.29 0.54 0.75 1.77 3.39 0.56 1.62 0.64 2.77 0.47 0.84 2.40 1.79 2.15
 Dry Biomass Density: 0.08 0.04 0.09 0.17 0.42 0.13 0.29 0.08 0.48 0.17 0.50 0.36
 Plant Water Density: 0.17 0.10 0.20 0.59 0.43 1.33 0.67 1.43

Corn Field # 9 Date: 7/28/82 (Julian: 209) Time: 14:35 Mean Canopy Height: 246.33 cm
 Top Leaf Height: 210.67 cm Top Cob Height: 125.33 cm Bottom Green Leaf Height: 28.83 cm Leaf Layer Depth: 181.83 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.24 0.13 0.27 0.44 0.71 1.60 3.10 0.58 1.51 0.17 2.10 0.43 0.78 1.77 1.50 1.82
 Wet Biomass Density: 0.24 0.13 0.27 0.44 0.71 1.60 3.10 0.58 1.51 0.17 2.10 0.43 0.78 1.77 1.50 1.82
 Dry Biomass Density: 0.24 0.13 0.27 0.44 0.71 1.60 3.10 0.58 1.51 0.17 2.10 0.43 0.78 1.77 1.50 1.82
 Plant Water Density: 0.24 0.13 0.27 0.44 0.71 1.60 3.10 0.58 1.51 0.17 2.10 0.43 0.78 1.77 1.50 1.82

Corn Field # 9 Date: 7/30/82 (Julian: 211) Time: 09:35 Mean Canopy Height: 242.50 cm
 Top Leaf Height: 208.50 cm Top Cob Height: 125.33 cm Bottom Green Leaf Height: 31.17 cm Leaf Layer Depth: 177.33 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.22 0.12 0.24 0.47 0.70 1.66 3.22 0.80 1.42 0.36 2.35 0.49 0.75 2.01 1.58 1.94
 Wet Biomass Density: 0.22 0.12 0.24 0.47 0.70 1.66 3.22 0.80 1.42 0.36 2.35 0.49 0.75 2.01 1.58 1.94
 Dry Biomass Density: 0.22 0.12 0.24 0.47 0.70 1.66 3.22 0.80 1.42 0.36 2.35 0.49 0.75 2.01 1.58 1.94
 Plant Water Density: 0.22 0.12 0.24 0.47 0.70 1.66 3.22 0.80 1.42 0.36 2.35 0.49 0.75 2.01 1.58 1.94

Corn Field # 9 Date: 8/ 2/82 (Julian: 214) Time: 10:35 Mean Canopy Height: 240.00 cm
 Top Leaf Height: 208.00 cm Top Cob Height: 131.33 cm Bottom Green Leaf Height: 26.50 cm Leaf Layer Depth: 181.50 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 62.49 70.13 66.35 71.78 76.33 73.54 73.95 77.02 75.88 88.28 77.96 71.62 75.60 74.96 75.26 74.64
 Wet Biomass Density: 0.23 0.14 0.28 0.42 0.72 1.51 3.02 0.33 0.90 0.16 1.32 0.34 0.58 1.67 1.28 1.54
 Dry Biomass Density: 0.09 0.04 0.09 0.12 0.17 0.40 0.79 0.08 0.22 0.02 0.29 0.10 0.14 0.42 0.32 0.39
 Plant Water Density: 0.14 0.10 0.18 0.30 0.55 2.23 0.25 0.68 1.03 0.25 0.44 0.96 1.15

Corn Field # 9 Date: 8/ 4/82 (Julian: 216) Time: 14:47 Mean Canopy Height: 240.17 cm
 Top Leaf Height: 212.00 cm Top Cob Height: 128.50 cm Bottom Green Leaf Height: 32.33 cm Leaf Layer Depth: 179.67 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.29 0.12 0.31 0.42 0.64 1.69 3.17 0.60 1.17 0.22 1.80 0.43 0.64 1.90 1.43 1.76
 Wet Biomass Density: 0.29 0.12 0.31 0.42 0.64 1.69 3.17 0.60 1.17 0.22 1.80 0.43 0.64 1.90 1.43 1.76
 Dry Biomass Density: 0.29 0.12 0.31 0.42 0.64 1.69 3.17 0.60 1.17 0.22 1.80 0.43 0.64 1.90 1.43 1.76
 Plant Water Density: 0.29 0.12 0.31 0.42 0.64 1.69 3.17 0.60 1.17 0.22 1.80 0.43 0.64 1.90 1.43 1.76

Corn Field # 9 Date: 8/ 9/82 (Julian: 221) Time: 10:04 Mean Canopy Height: 238.67 cm
 Top Leaf Height: 215.83 cm Top Cob Height: 127.17 cm Bottom Green Leaf Height: 27.00 cm Leaf Layer Depth: 188.83 cm
 Plant Parts: L1L LIS TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 64.59 67.16 65.77 76.75 61.11 73.10 80.12 73.45 77.52 78.11 63.27 69.84
 Wet Biomass Density: 0.22 0.13 0.29 0.55 0.78 1.80 3.60 0.45 1.26 0.38 2.04 0.43 0.72 2.18 1.64 1.98
 Dry Biomass Density: 0.08 0.04 0.10 0.18 0.70 0.12 0.25 0.10 0.46 0.16 0.80 0.49
 Plant Water Density: 0.14 0.09 0.19 0.60 0.33 1.01 1.58

Corn Field # 9 Date: 8/18/82 (Julian: 230) Time: : Mean Canopy Height: 244.17 cm
 Top Leaf Height: 216.00 cm Top Cob Height: 129.67 cm Bottom Green Leaf Height: 39.67 cm Leaf Layer Depth: 176.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 64.53 63.23 64.05 71.31 75.92 55.69 62.19 73.93 77.43 70.48 75.83 70.97 76.21 57.21 65.77 66.71
 Wet Biomass Density: 0.30 0.11 0.31 0.58 0.80 2.05 3.90 0.69 1.38 0.23 2.02 0.52 0.77 2.28 1.70 2.08
 Dry Biomass Density: 0.10 0.04 0.11 0.17 0.19 0.91 1.47 0.18 0.31 0.07 0.49 0.15 0.18 0.98 0.58 0.69
 Plant Water Density: 0.19 0.07 0.20 0.42 0.61 2.43 0.51 1.07 1.53 0.37 0.58 1.12 1.39

Corn Field # 9 Date: 8/31/82 (Julian: 243) Time: 11:10 Mean Canopy Height: 235.50 cm
 Top Leaf Height: cm Top Cob Height: cm Bottom Green Leaf Height: cm Leaf Layer Depth: cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field #10 Date: 5/19/82 (Julian: 139) Time: 16:30 Mean Canopy Height: 26.33 cm
 Top Leaf Height: 26.33 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 26.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

0.17

Corn Field #10 Date: 5/24/82 (Julian: 144) Time: 14:33 Mean Canopy Height: 33.17 cm
 Top Leaf Height: 32.00 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 32.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field #10 Date: 5/26/82 (Julian: 146) Time: 09:48 Mean Canopy Height: 35.17 cm
 Top Leaf Height: 35.17 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 35.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

0.25

Corn Field #10 Date: 6/ 1/82 (Julian: 152) Time: 10:55 Mean Canopy Height: 43.67 cm
 Top Leaf Height: 43.67 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 43.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

0.68

Corn Field #10 Date: 6/ 4/82 (Julian: 155) Time: 10:56 Mean Canopy Height: 44.17 cm
 Top Leaf Height: 44.17 cm Top Cob Height: cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 44.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

0.81

Corn Field #10 Date: 6/ 7/82 (Julian: 158) Time: 12:00 Mean Canopy Height: 57.50 cm
 Top Leaf Height: 57.50 cm Top Cob Height: 0. cm Leaf Layer Depth: 57.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.44
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field #10 Date: 6/ 9/82 (Julian: 160) Time: 13:20 Mean Canopy Height: 57.17 cm
 Top Leaf Height: 57.17 cm Top Cob Height: 0. cm Leaf Layer Depth: 57.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 1.12
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn Field #10 Date: 6/14/82 (Julian: 165) Time: 10:13 Mean Canopy Height: 72.50 cm
 Top Leaf Height: 72.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 72.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 82.52 0. 82.52 86.32 98.06 0. 92.12 94.52 0. 95.40 0. 95.40
 Wet Biomass Density: 0.90 0. 0.88 0.67 0.66 0. 1.33 0.12 1.99 0. 2.11 0.56 0.88 0. 0.88 1.44
 Dry Biomass Density: 0.16 0. 0.15 0.09 0.01 0. 0.11 0.11 0. 0.04 0. 0.04 0. 0.04 0. 0.04
 Plant Water Density: 0.74 0. 0.73 0.58 0.65 1.23 1.88 0.84

Corn Field #10 Date: 6/16/82 (Julian: 167) Time: : Mean Canopy Height: 82.83 cm
 Top Leaf Height: 82.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 82.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.90 0. 0.87 0.87 1.33 0. 2.20 0.33 2.28 0. 2.61 0.70 1.20 0. 1.20 1.89
 Dry Biomass Density:
 Plant Water Density:

Corn Field #10 Date: 6/18/82 (Julian: 169) Time: 14:24 Mean Canopy Height: 92.17 cm
 Top Leaf Height: 92.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 92.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.90 0. 0.90 0.82 0.89 0. 1.72 0.18 2.48 0. 2.66 0.63 1.12 0. 1.12 1.76
 Dry Biomass Density:
 Plant Water Density:

Corn Field #10 Date: 6/21/82 (Julian: 172) Time: 11:50 Mean Canopy Height: 130.83 cm
 Top Leaf Height: 130.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 130.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 79.84 0. 79.84 80.85 0. 83.43 94.17 0. 92.89 81.05 0. 1.92 2.58
 Wet Biomass Density: 0.84 0. 0.83 0.66 2.23 0. 2.90 0.48 3.54 0. 4.01 0.66 1.92 0. 1.92 2.58
 Dry Biomass Density: 0.17 0. 0.17 0.13 0. 0.08 0.21 0. 0.29 0.13 0. 0.13 0. 0.13 0. 0.13
 Plant Water Density: 0.67 0. 0.66 0.54 0.40 3.33 3.73 0.54

Corn Field #10 Date: 6/25/82 (Julian: 176) Time: 09:32 Mean Canopy Height: 159.83 cm
 Top Leaf Height: 159.00 cm Top Cob Height: 0. cm Leaf Layer Depth: 159.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.50 0.26 0.76 0.93 2.36 0. 3.30 0.56 3.47 0. 4.03 0.67 2.03 0. 2.03 2.70
 Dry Biomass Density:
 Plant Water Density:

Corn field #10 Date: 6/28/82 (Julian: 179) Time: 15:35 Mean Canopy Height: 195.67 cm
 Top Leaf Height: 195.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 195.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.13 0.26 0.40 0.35 2.45 0. 2.80 0.67 1.67 0. 2.34 0.39 1.46 0. 1.46 1.85
 Dry Biomass Density:
 Plant Water Density:

Corn field #10 Date: 6/30/82 (Julian: 181) Time: : Mean Canopy Height: 218.00 cm
 Top Leaf Height: 208.00 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 208.00 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field #10 Date: 7/ 2/82 (Julian: 183) Time: 10:13 Mean Canopy Height: 242.33 cm
 Top Leaf Height: 230.83 cm Top Cob Height: 0. cm Bottom Green Leaf Height: 0. cm Leaf Layer Depth: 242.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.23 0.35 0.55 0.62 1.74 0. 2.36 2.60 0. 3.03 1.56 0. 1.56 1.98
 Dry Biomass Density:
 Plant Water Density:

Corn field #10 Date: 7/ 7/82 (Julian: 188) Time: 11:10 Mean Canopy Height: 265.00 cm
 Top Leaf Height: 225.33 cm Top Cob Height: 154.67 cm Bottom Green Leaf Height: 23.00 cm Leaf Layer Depth: 202.33 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 73.59 77.41 75.73 77.71 84.28 92.58 85.51 0. 3.04 0.66 1.31 0.89 1.65 2.15
 Wet Biomass Density: 0.49 0.34 0.61 0.75 1.05 0.89 2.80 0. 0. 0.07 0.41 0.07
 Dry Biomass Density: 0.13 0.08 0.15 0.17 0.17 0.07 0.41 0. 0. 0.07 0.41 0.07
 Plant Water Density: 0.36 0.26 0.46 0.58 0.89 2.40

Corn field #10 Date: 7/ 9/82 (Julian: 190) Time: 15:31 Mean Canopy Height: 262.00 cm
 Top Leaf Height: 236.17 cm Top Cob Height: 155.50 cm Bottom Green Leaf Height: 25.67 cm Leaf Layer Depth: 210.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.28 0.26 0.46 0.59 1.11 0.36 2.12 0.61 2.00 0.19 2.64 0.50 1.12 0.55 1.33 1.74
 Dry Biomass Density:
 Plant Water Density:

Corn field #10 Date: 7/12/82 (Julian: 193) Time: 14:45 Mean Canopy Height: 270.50 cm
 Top Leaf Height: 231.67 cm Top Cob Height: 154.00 cm Bottom Green Leaf Height: 29.17 cm Leaf Layer Depth: 202.50 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.45 0.24 0.49 0.72 0.91 1.30 3.07 0.84 2.87 0.63 4.13 0.69 1.34 1.93 2.05 2.57
 Dry Biomass Density:
 Plant Water Density:

Corn field #10 Date: 7/13/82 (Julian: 194) Time: 15:10 Mean Canopy Height: 256.33 cm
 Top Leaf Height: 237.50 cm Top Cob Height: 130.67 cm Bottom Green Leaf Height: 24.33 cm Leaf Layer Depth: 213.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture:
 Wet Biomass Density: 0.22 0.34 0.51 0.59 1.06 1.12 2.96 0.67 2.50 0.10 3.09 0.50 1.30 1.22 1.78 2.19
 Dry Biomass Density:
 Plant Water Density:

Corn field #10 Date: 7/15/82 (Julian: 196) Time: 10:51 Mean Canopy Height: 270.83 cm
 Top Leaf Height: 229.00 cm Top Cob Height: 155.50 cm Bottom Green Leaf Height: 30.83 cm Leaf Layer Depth: 198.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 0.52 0.24 0.52 0.66 1.05 1.07 2.89 0.59 2.10 0.41 2.94 0.60 1.13 1.48 1.67 2.11
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Corn field #10 Date: 7/23/82 (Julian: 204) Time: 10:40 Mean Canopy Height: 267.00 cm
 Top Leaf Height: 231.50 cm Top Cob Height: 154.50 cm Bottom Green Leaf Height: 38.33 cm Leaf Layer Depth: 193.17 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 70.10 70.70 70.38 78.74 78.29 84.49 81.87 79.88 87.16 89.24 86.06 77.73 83.72 84.94 84.20 82.96
 Wet Biomass Density: 0.38 0.20 0.43 0.61 0.97 1.83 3.63 0.91 2.29 0.19 3.02 0.62 1.15 2.02 1.91 2.36
 Dry Biomass Density: 0.11 0.06 0.13 0.13 0.21 0.28 0.66 0.18 0.29 0.02 0.42 0.14 0.19 0.30 0.30 0.40
 Plant Water Density: 0.26 0.14 0.30 0.48 0.76 2.97 0.73 2.00 2.60 0.48 0.97 1.61 1.96

Corn field #10 Date: 7/26/82 (Julian: 207) Time: 12:00 Mean Canopy Height: 269.00 cm
 Top Leaf Height: 234.83 cm Top Cob Height: 150.17 cm Bottom Green Leaf Height: 37.17 cm Leaf Layer Depth: 197.67 cm
 Plant Parts: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % Plant Moisture: 69.98 69.06 69.53 75.66 77.61 88.27 83.35 79.79 84.34 86.85 83.86 75.68 81.16 88.18 84.13 82.56
 Wet Biomass Density: 0.41 0.24 0.50 0.70 1.01 2.04 3.99 0.61 2.06 0.14 2.57 0.59 1.10 2.18 1.91 2.35
 Dry Biomass Density: 0.12 0.08 0.15 0.17 0.23 0.24 0.66 0.12 0.32 0.02 0.41 0.14 0.21 0.26 0.30 0.41
 Plant Water Density: 0.29 0.17 0.35 0.53 0.78 3.32 0.49 1.74 2.15 0.45 0.90 1.61 1.94

Appendix III.b.2
Plant Density--Corn Fields

Field	Row Separation (cm)			Number of Plants per 5 m of Row			Number of Plants per m ²	Number of Mature Cobs		
	Mean	S.D.	N	Mean	S.D.	N		Mean	S.D.	N
C 1	75.3	1.5	18	20.4	1.8	18	5.4	20.3	1.8	6
C 2	73.9	1.9	18	18.2	2.4	12	5.0	15.8	2.3	6
C 3	75.9	3.0	18	20.4	2.5	18	5.4	20.2	1.7	6
C 4	79.2	6.1	18	19.3	2.1	18	4.9	16.5	1.9	6
C 5	77.2	6.2	18	20.6	2.8	18	5.3	20.3	1.6	6
C 6	75.2	2.9	18	18.5	3.1	18	4.9	16.5	3.9	6
C 7	77.6	3.0	12	15.6	2.0	12	4.0	16.0	2.6	6
C 8	73.2	3.3	18	17.0	2.0	18	4.6	17.3	1.5	6
C 9	77.2	2.9	18	14.9	2.3	18	3.9	17.8	5.2	6
C10	75.7	1.9	12	20.4	3.3	12	5.4	--	--	--
C21	76.3	2.6	6	18.8	2.6	18	4.9	18.8	2.2	12

Appendix III.b.3
Corn Field Soil Moisture Data

Corn Depth	Field#	Date: 5/19/82 (Julian: 139)				Time	S.D.	S.D./Mean	Field#	Date: 6/25/82 (Julian: 176)				Time	S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5		
0-2 cm	25.18	24.63	26.46	24.50	28.63	28.32	26.28	1.83	0.70	19.82	22.85	22.87	29.31	24.40	24.98	24.04
2-5 cm	31.58	20.31	25.32	22.92	26.01	28.08	25.70	3.93	1.53	22.10	21.43	23.41	22.48	25.00	22.30	22.79
0-5 cm	29.02	22.04	25.78	23.55	27.06	28.17	25.94	3.09	1.20	21.19	22.00	23.20	25.21	24.76	23.37	22.91
Corn Depth	Field#	Date: 5/21/82 (Julian: 141)				Time	S.D.	S.D./Mean	Field#	Date: 6/28/82 (Julian: 179)				Time	S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5		
0-2 cm	24.20	27.80	17.64	22.21	15.30	19.36	21.09	4.57	2.17	26.63	23.00	26.02	23.02	27.46	22.96	24.85
2-5 cm	25.91	25.79	19.56	23.38		20.29	22.99	2.98	1.30	22.92	23.29	22.48	23.32	22.15	23.27	22.90
0-5 cm	25.23	26.59	18.80	22.91		19.92	22.23	3.62	1.64	24.40	23.17	23.90	23.20	24.27	23.14	23.68
Corn Depth	Field#	Date: 5/26/82 (Julian: 146)				Time	S.D.	S.D./Mean	Field#	Date: 7/6/82 (Julian: 187)				Time	S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5		
0-2 cm	30.33	41.77	27.15	29.44	33.66	32.74	32.51	5.10	1.57	14.75	17.26	16.33	13.84	17.64	16.64	16.08
2-5 cm	31.44	36.14	28.49	27.68	35.28	28.36	31.23	3.71	1.19	22.14	20.35	20.75	18.11	20.59	21.92	20.64
0-5 cm	31.00	38.39	27.95	28.39	34.63	30.11	31.75	4.27	1.34	19.18	19.12	18.98	16.40	19.41	19.80	18.82
Corn Depth	Field#	Date: 6/2/82 (Julian: 153)				Time	S.D.	S.D./Mean	Field#	Date: 7/7/82 (Julian: 188)				Time	S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5		
0-2 cm	30.03	31.82	29.26	28.60	28.13	33.01	30.14	1.91	0.63	7.20	6.39	7.49	9.28	12.55	10.53	8.91
2-5 cm	24.93	32.46	27.66	27.79	30.03	32.03	29.15	2.90	0.99	16.16	14.70		15.77	17.74	16.29	16.13
0-5 cm	26.97	32.21	28.30	28.12	29.27	32.42	29.55	2.50	0.85	12.58	11.38		13.17	15.67	13.99	13.24
Corn Depth	Field#	Date: 6/4/82 (Julian: 155)				Time	S.D.	S.D./Mean	Field#	Date: 7/12/82 (Julian: 193)				Time	S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5		
0-2 cm	30.49	33.14	29.72	30.14	29.53	37.11	31.69	2.96	0.94	19.41	16.38	19.76	18.70	19.24	17.60	18.52
2-5 cm	32.91	31.57	32.75	48.63	29.21	28.46	33.92	7.43	2.19	20.42	17.57	20.74	19.93	20.10	18.51	19.54
0-5 cm	31.94	32.20	31.54	41.24	29.34	31.92	33.03	5.65	1.69	20.01	17.10	20.35	19.44	19.76	18.15	19.13
Corn Depth	Field#	Date: 6/14/82 (Julian: 165)				Time	S.D.	S.D./Mean	Field#	Date: 7/13/82 (Julian: 194)				Time	S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5		
0-2 cm	27.98	41.97	29.05	28.66	27.65	33.45	31.46	5.56	1.77	24.60	24.98	24.08	26.97	23.24	30.34	25.70
2-5 cm	26.15	28.55	27.94	26.27	30.35	30.63	28.32	1.93	0.68	23.80	23.99	23.49	24.07	25.44	25.55	24.39
0-5 cm	26.88	33.92	28.39	27.22	29.27	31.76	29.57	3.38	1.12	24.12	24.39	23.73	25.23	24.56	27.47	24.92
Corn Depth	Field#	Date: 6/16/82 (Julian: 167)				Time	S.D.	S.D./Mean	Field#	Date: 7/15/82 (Julian: 196)				Time	S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5		
0-2 cm	30.15	32.52	28.76	29.00	30.17	33.28	30.65	1.85	0.61	19.94	19.02	19.80	22.15	22.42	20.41	20.62
2-5 cm	33.45	34.26	29.64	27.53	29.90	29.38	30.69	2.60	0.85	20.94	19.48	19.86	14.91	23.18	19.21	19.60
0-5 cm	32.13	33.56	29.28	28.12	30.01	30.94	30.68	2.30	0.75	20.54	19.30	19.84	17.80	22.88	19.69	20.01
Corn Depth	Field#	Date: 6/21/82 (Julian: 172)				Time	S.D.	S.D./Mean	Field#	Date: 7/19/82 (Julian: 200)				Time	S.D.	S.D./Mean
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5		
0-2 cm	24.36	22.13	23.53	29.65	20.12	24.46	24.04	3.20	1.33	6.76	5.37	8.13	7.79	9.21	8.98	7.70
2-5 cm	25.48	24.45	24.06	24.08	24.79	25.39	24.71	0.62	0.25	13.34	10.44	14.99	14.58	14.81	14.17	13.72
0-5 cm	25.03	23.52	23.85	26.31	22.92	25.01	24.44	1.65	0.68	10.71	8.41	12.25	11.86	12.57	12.09	11.32

Corn		Field#:	1	Date:	7/23/82 (Julian: 204)	Time: 13:20	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		10.49	15.11	8.45	15.97	10.87	18.33	13.20	3.82
2-5 cm		17.96	18.43	14.28	17.45	11.70	17.75	16.26	2.68
0-5 cm		14.97	17.10	11.95	16.86	11.37	17.98	15.04	3.14
Corn		Field#:	1	Date:	7/26/82 (Julian: 207)	Time:	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		6.47	6.79	3.80	2.98	5.09		5.03	1.65
2-5 cm		11.33	10.43	8.22	7.63	10.38		9.60	1.59
0-5 cm		9.39	8.97	6.45	5.77	8.26		7.77	1.61
Corn		Field#:	1	Date:	7/28/82 (Julian: 209)	Time: 14:14	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		2.23	3.51	2.21	3.77	3.20	2.92	2.97	0.65
2-5 cm		6.04	6.05	5.19	8.31	5.59	6.15	6.22	1.09
0-5 cm		4.52	5.03	4.00	6.50	4.63	4.86	4.92	0.91
Corn		Field#:	1	Date:	7/30/82 (Julian: 211)	Time: 11:00	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		1.29	0.93	7.66	7.63	7.53	0.88	4.32	3.60
2-5 cm		2.70	3.06	12.72	12.98	12.19	2.78	7.74	5.36
0-5 cm		2.14	2.21	10.69	10.84	10.33	2.02	6.37	4.66
Corn		Field#:	1	Date:	8/2/82 (Julian: 214)	Time: 13:54	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		1.77	3.11	2.12	2.27	2.45	2.00	2.29	0.47
2-5 cm		3.43	3.17	2.79	3.33	2.61	3.92	3.21	0.47
0-5 cm		2.76	3.15	2.52	2.90	2.54	3.15	2.84	0.47
Corn		Field#:	1	Date:	8/11/82 (Julian: 223)	Time: 13:11	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		19.64	19.08	22.69	17.17	15.94	17.88	18.73	2.35
2-5 cm		18.38	18.35	17.20	16.15	13.69	17.11	16.81	1.75
0-5 cm		18.88	18.64	19.39	16.56	14.59	17.42	17.58	1.99
Corn		Field#:	1	Date:	8/16/82 (Julian: 228)	Time: 16:00	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		20.78	19.71	18.75	19.08	19.12	20.25	19.61	0.78
2-5 cm		22.80	16.68	17.80	16.66	17.14	23.11	19.03	3.07
0-5 cm		21.99	17.89	18.18	17.62	17.93	21.97	19.26	2.15
Corn		Field#:	1	Date:	8/18/82 (Julian: 230)	Time: 12:20	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		23.10	24.97	19.96	22.82	19.80	19.59	21.70	2.24
2-5 cm		21.09	20.84	19.89	18.70	18.91	19.29	19.79	1.00
0-5 cm		21.89	22.49	19.92	20.34	19.27	19.41	20.55	1.50

III.b.3-3

Corn		Field#:	1	Date:	8/20/82 (Julian: 232)	Time: 15:00	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		16.72	14.52	18.10	17.95	18.97	17.31	17.26	1.54
2-5 cm		18.56	18.90	18.68	18.73	18.75	19.03	18.77	0.17
0-5 cm		17.82	17.15	18.45	18.42	18.84	18.34	18.17	0.41
Corn		Field#:	1	Date:	9/9/82 (Julian: 252)	Time:	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		21.68	21.60	22.48	21.48	20.08	21.61	21.49	0.78
2-5 cm		21.20	20.83	22.61	21.62	20.26	20.95	21.25	0.81
0-5 cm		21.39	21.14	22.56	21.56	20.19	21.21	21.34	0.79
Corn		Field#:	1	Date:	9/16/82 (Julian: 259)	Time: 10:30	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		21.09	19.34	21.23	17.07	17.91	16.65	18.88	1.99
2-5 cm		20.15	17.55	19.30	10.51	17.16	18.41	17.18	3.45
0-5 cm		20.53	18.27	20.07	13.13	17.46	17.71	17.86	2.87
Corn		Field#:	2	Date:	5/19/82 (Julian: 139)	Time:	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		26.28	30.45	24.24	26.43	22.61	23.68	25.61	2.80
2-5 cm		31.00	26.74	26.61	19.22	27.90	25.92	26.23	3.88
0-5 cm		29.11	28.22	25.66	22.10	25.78	25.02	25.98	3.45
Corn		Field#:	2	Date:	5/21/82 (Julian: 141)	Time: 14:17	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		24.14	26.62	24.56		25.54		25.21	1.11
2-5 cm		25.96	28.00	29.26	30.05	27.29	29.73	28.38	1.59
0-5 cm		25.23	27.45	27.38		26.59		27.12	1.39
Corn		Field#:	2	Date:	5/26/82 (Julian: 146)	Time: 14:00	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		35.31	40.30	33.70	31.47	31.53	39.56	35.31	3.86
2-5 cm		30.83	39.00	34.19	33.37	34.52	38.01	34.99	3.03
0-5 cm		32.63	39.52	33.99	32.61	33.32	38.63	35.12	3.36
Corn		Field#:	2	Date:	6/4/82 (Julian: 155)	Time: 11:51	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		32.65	34.60	28.30	30.10	37.58	40.18	33.90	4.49
2-5 cm		35.45	31.11	29.94	31.67	32.68	33.55	32.40	1.95
0-5 cm		34.33	32.50	29.28	31.04	34.64	36.20	33.00	2.96
Corn		Field#:	2	Date:	6/14/82 (Julian: 165)	Time: 15:00	S.D.		S.D./Mean
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm		35.27	30.75	27.20	31.09	33.62	31.39	31.55	2.76
2-5 cm		30.94	32.59	26.60	30.98	32.62	32.59	31.05	2.32
0-5 cm		32.67	31.85	26.84	31.03	33.02	32.11	31.25	2.50

III.b.3-4

Corn	Field#	2	Date: 6/16/82 (Julian: 167)	Time: 09:25	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	28.33	30.88	29.62	28.75	28.03	38.24	30.64	3.86	1.26
2-5 cm	29.63	31.99	31.78	27.36	29.28	33.11	30.52	2.13	0.70
0-5 cm	29.11	31.54	30.92	27.92	28.78	35.16	30.57	2.83	0.92
Corn	Field#	2	Date: 6/21/82 (Julian: 172)	Time: 09:40	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19.64	21.88	20.36	17.64	21.59	18.81	19.99	1.63	0.82
2-5 cm	24.28	23.58	23.70	23.77	22.95	24.08	23.73	0.46	0.19
0-5 cm	22.42	22.90	22.36	21.32	22.40	21.97	22.23	0.93	0.44
Corn	Field#	2	Date: 6/25/82 (Julian: 176)	Time: 11:10	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.13	19.89	27.58	23.91	21.94	25.59	23.34	2.90	1.24
2-5 cm	24.65	22.70	24.45	26.11	24.48	26.24	24.77	1.30	0.53
0-5 cm	23.24	21.57	25.70	25.23	23.46	25.98	24.20	1.94	0.81
Corn	Field#	2	Date: 6/28/82 (Julian: 179)	Time: 14:39	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	28.01	26.23	25.37	29.77	27.56	25.79	27.12	1.65	0.61
2-5 cm	26.11	25.81	25.09	28.07	27.02	26.60	26.45	1.04	0.39
0-5 cm	26.87	25.98	25.20	28.75	27.23	26.28	26.72	1.28	0.48
Corn	Field#	2	Date: 7/ 6/82 (Julian: 187)	Time: 11:23	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13.02	7.97	10.60	14.77	19.13	16.16	13.61	3.99	2.93
2-5 cm	18.46	15.92	16.82	19.38	20.79	20.53	18.65	1.97	1.06
0-5 cm	16.28	12.74	14.33	17.53	20.12	18.78	16.63	2.78	1.81
Corn	Field#	2	Date: 7/ 7/82 (Julian: 188)	Time: 13:50	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.48	4.73		8.98	10.86	6.09	7.83	2.43	3.10
2-5 cm	15.58	13.86	14.82	19.05	21.82	17.69	17.14	2.98	1.74
0-5 cm	12.74	10.21		15.02	17.44	13.05	13.41	2.76	2.28
Corn	Field#	2	Date: 7/12/82 (Julian: 193)	Time: 10:18	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	23.92	21.48	24.14	28.22	27.51	27.31	25.43	2.65	1.04
2-5 cm	22.82	22.62	23.75	25.07	22.68	24.58	23.59	1.05	0.45
0-5 cm	23.26	22.16	23.91	26.33	24.61	25.67	24.32	1.69	0.69
Corn	Field#	2	Date: 7/15/82 (Julian: 196)	Time: 12:52	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	20.12	16.16	16.62	25.36	22.14	25.68	21.02	4.14	1.97
2-5 cm	21.38	18.89	22.34	23.36	22.74	24.60	22.22	1.95	0.88
0-5 cm	20.87	17.80	20.05	24.16	22.50	25.04	21.74	2.83	1.31

III b 3-5

Corn	Field#:	2	Date: 7/19/82 (Julian: 200)	Time: 10:00	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5.80	7.61	5.70	6.68	12.87	8.06	7.79	2.67	3.43
2-5 cm	11.35	10.77	11.04	13.48	17.27	9.92	12.31	2.71	2.20
0-5 cm	9.13	9.51	8.90	10.76	15.51	9.18	10.50	2.69	2.69
Corn	Field#:	2	Date: 7/23/82 (Julian: 204)	Time: 13:38	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	10.61	5.45	6.96	4.45	3.80	11.33	7.10	3.19	4.49
2-5 cm	14.44	13.63	13.00	14.10	14.00	16.26	14.24	1.10	0.77
0-5 cm	12.91	10.36	10.59	10.24	9.92	14.29	11.38	1.94	2.26
Corn	Field#:	2	Date: 7/26/82 (Julian: 207)	Time:	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5.34	4.19	5.37	6.88	7.62	4.49	5.65	1.35	2.38
2-5 cm	9.66	10.91	13.46	12.65	13.57	13.86	12.35	1.70	1.37
0-5 cm	7.93	8.22	10.22	10.34	11.19	10.11	9.67	1.56	1.78
Corn	Field#:	2	Date: 7/28/82 (Julian: 209)	Time: 14:28	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	11.93	8.45	16.13	9.37	15.12	7.46	11.41	3.60	3.16
2-5 cm	17.50	22.09	19.47	13.02	19.06	14.84	17.66	3.30	1.87
0-5 cm	15.27	16.63	18.13	11.56	17.48	11.89	15.16	3.42	2.38
Corn	Field#:	2	Date: 7/30/82 (Julian: 211)	Time: 11:20	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	4.95	7.17	6.93	5.28	7.61	8.60	6.76	1.40	2.07
2-5 cm	10.80	15.39	17.06	9.54	12.17	13.97	13.16	2.84	2.16
0-5 cm	8.46	12.10	13.01	7.84	10.35	11.83	10.60	2.27	2.13
Corn	Field#:	2	Date: 8/ 2/82 (Julian: 214)	Time: 14:30	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5.62	8.61	3.95	6.20	8.22	10.62	7.20	2.40	3.33
2-5 cm	11.12	15.12	10.35	11.04	15.09	19.05	13.63	3.39	2.49
0-5 cm	8.92	12.52	7.79	9.11	12.35	15.68	11.06	2.99	2.83
Corn	Field#:	2	Date: 8/ 9/82 (Julian: 221)	Time: 11:10	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.96	22.70	22.43	22.34	24.22	20.52	22.36	1.19	0.53
2-5 cm	22.45	22.04	22.08	20.85	21.04	21.35	21.63	0.64	0.30
0-5 cm	22.25	22.30	22.22	21.45	22.31	21.02	21.93	0.86	0.39
Corn	Field#:	2	Date: 8/16/82 (Julian: 228)	Time: 15:35	S.D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	27.89	28.64	27.21	11.96	11.10	32.51	23.22	9.24	3.98
2-5 cm	31.50	23.06	22.77	11.27	36.63	26.56	25.30	8.68	3.43
0-5 cm	30.06	25.29	24.54	11.55	26.42	28.94	24.47	8.90	3.65

III b.3-6

Corn	Field#	2	Date: 8/18/82 (Julian: 230)					Time: 13:05										
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean									
0-2 cm	25	93	23.60	24.50	37	95	25	92	27.03	27.49								
2-5 cm	14	94	23.85	23.90	31	21	26.78	24.93	24.27	5.33								
0-5 cm	19	34	23.75	24.14	33	91	26	43	25.77	25	56	5.31	2.08					
Corn	Field#	2	Date: 9/ 9/82 (Julian: 252)					Time:										
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6 <td>Mean<td>S.D.<th>S.D./Mean</th></td></td>	Mean <td>S.D.<th>S.D./Mean</th></td>	S.D. <th>S.D./Mean</th>	S.D./Mean									
0-2 cm	26	15	26.47	26.42	25.72	27	13	30.56	27.08	1.77	0	65						
2-5 cm	27	01	27	93	25	60	25	31	25.61	26.70	26	36	1.02	0	39			
0-5 cm	26	67	27	35	25	93	25	47	26.22	28.24	26	65	1.32	0	49			
Corn	Field#	2	Date: 9/16/82 (Julian: 259)					Time: 10:40										
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean									
0-2 cm	25	29	22	71	22	99	19	90	23.80	23	26	22	99	1	77	0	77	
2-5 cm	26	20	21	51	22	00	23	99	23	23	23	32	23	38	1	66	0	71
0-5 cm	25	84	21	99	22	40	22	36	23	46	23	30	23	22	1	70	0	73
Corn	Field#	2	Date: 9/23/82 (Julian: 266)					Time: 13:00										
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean									
0-2 cm	14	80	17	11	15	24	17	88	19	97	17	44	17	07	1	88	1	10
2-5 cm	20	81	20	48	20	82	20	71	19	55	19	50	20	31	0	62	0	31
0-5 cm	18	41	19	13	18	59	19	58	19	72	18	68	19	02	1	13	0	62
Corn	Field#	2	Date: 9/28/82 (Julian: 271)					Time:										
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean									
0-2 cm	11	69	11	45	9	99	13	61	12	95	9	89	11	60	1	51	1	30
2-5 cm	23	74	23	74	18	97	18	98	19	48	15	65	20	09	3	14	1	56
0-5 cm	18	92	18	82	15	38	16	84	16	87	13	35	16	70	2	49	1	46
Corn	Field#	2	Date: 9/30/82 (Julian: 273)					Time:										
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean									
0-2 cm	9	27	11	45	11	64	10	46	8	73	19	53	11	85	3	94	3	33
2-5 cm	18	88	16	69	19	72	20	19	19	48	13	24	18	03	2	65	1	47
0-5 cm	15	03	14	59	16	49	16	30	15	18	15	76	15	56	3	16	2	21
Corn	Field#	2	Date: 10/ 5/82 (Julian: 278)					Time:										
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean									
0-2 cm	11	12	8	50	9	72	13	01	12	29	10	55	10	87	1	65	1	52
2-5 cm	16	10	15	06	14	25	17	34	18	54	17	09	16	40	1	58	0	96
0-5 cm	14	11	12	44	12	44	15	60	16	04	14	47	14	18	1	61	1	19
Corn	Field#	2	Date: 10/12/82 (Julian: 285)					Time:										
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6 <td>Mean<th>S.D.</th><th>S.D./Mean</th></td>	Mean <th>S.D.</th> <th>S.D./Mean</th>	S.D.	S.D./Mean									
0-2 cm	23	62	20	33	24	22	19	22	22	14	29	06	23	10	3	48	1	51
2-5 cm	23	56	22	49	24	19	23	94	22	23	26	08	23	75	1	38	0	58
0-5 cm	23	58	21	62	24	20	22	05	22	19	27	27	23	49	2	22	0	95

III.b.3-7

Corn	Field#	3	Date: 5/19/82 (Julian: 139)			Time:			S.D.	S.D./Mean
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	18	54	16.84	15.38	22	37	22.49	26	90	24
2-5 cm	25	05	19.34	21	84	22	93	23.63	26.31	23
0-5 cm	22	45	18	34	19.25	22.71	23.17	26.54	22	08
Corn	Field#	3	Date: 5/21/82 (Julian: 141)			Time: 14:38			S.D.	S.D./Mean
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	14	00	16.75	15.06	13.85	10	24	13.98	2.39	1.71
2-5 cm	17	92	23.38	19.06	16.33	16	22	18	67	18.59
0-5 cm	16	35	20	73	17	46	15	34	13.83	16
Corn	Field#	3	Date: 5/26/82 (Julian: 146)			Time: 14:20			S.D.	S.D./Mean
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	28	45	27.98	28.15	32.51	36	02	26.43	29.92	3.61
2-5 cm	27	57	27.73	28.35	30.41	31	14	25	94	28.52
0-5 cm	27	92	27.83	28.27	31.25	33.09	26	13	29	08
Corn	Field#	3	Date: 6/ 1/82 (Julian: 152)			Time: 13:02			S.D.	S.D./Mean
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	18	17	14.78	33.59	25	57	27	53	23.93	7
2-5 cm	21	82	23	16	28	29	28	16	27	01
0-5 cm	20	36	19.81	30.33	26.44	27	33	25.13	4	66
Corn	Field#	3	Date: 6/ 2/82 (Julian: 153)			Time: 12:26			S.D.	S.D./Mean
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	27	88	22	96	27.88	24.65	25	45	24	88
2-5 cm	26	06	27.99	26	69	20	99	23.78	25	00
0-5 cm	26	79	25.98	27.17	22	45	24	45	24	95
Corn	Field#	3	Date: 6/ 4/82 (Julian: 155)			Time: 15:11			S.D.	S.D./Mean
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	27	70	33.09	29.46	32	72	26.06	30	62	29
2-5 cm	27	08	30.20	29.33	31	69	26.78	27	80	28
0-5 cm	27	33	31.36	29	38	32.11	26.49	28.93	29	26
Corn	Field#	3	Date: 6/ 7/82 (Julian: 158)			Time: 10:00			S.D.	S.D./Mean
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	26	74	33.63	28	60	32.79	36	63	28	39
2-5 cm	26	63	28	84	28.86	31.57	33.69	28	30	29.65
0-5 cm	26	67	30	76	28.75	32	06	34.87	28	34
Corn	Field#	3	Date: 6/ 9/82 (Julian: 160)			Time: 13:57			S.D.	S.D./Mean
			LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	Mean		
0-2 cm	25	43	32	06	27.54	28.29	21	66	28.76	27
2-5 cm	25	70	27.52	27.75	27	19	24	14	26	30
0-5 cm	25	59	29	34	27	67	27.63	23	15	27

III.b.3-8

Corn									
Field#:	3	Date:	6/14/82	(Julian:	165)	Time:	15:20		
LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
28.41	29.28	26.02	32.58	25.27	28.31	2.90	1.02		
0-2 cm	26.18	26.22	26.58	24.98	23.56	23.54	25.17	1.37	0.55
2-5 cm	27.07	27.44	26.36	24.02	23.54	26.43	1.98	0.74	
0-5 cm									
Corn									
Field#:	3	Date:	6/16/82	(Julian:	167)	Time:	10:30		
LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
19.61	26.13	25.53	37.43	30.97	26.66	27.72	5.98	2.16	
0-2 cm	26.97	24.02	25.57	29.81	28.54	27.81	27.12	2.09	0.77
2-5 cm	24.02	24.86	25.55	32.86	29.51	27.35	27.36	3.65	1.33
0-5 cm									
Corn									
Field#:	3	Date:	6/18/82	(Julian:	169)	Time:	13:40		
LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
25.13	19.52	25.46	25.30	30.22	23.69	24.89	3.44	1.38	
0-2 cm	24.98	21.45	24.49	22.99	27.47	23.31	24.11	2.06	0.85
2-5 cm	25.04	20.68	24.88	23.92	28.57	23.46	24.42	2.61	1.07
0-5 cm									
Corn									
Field#:	3	Date:	6/21/82	(Julian:	172)	Time:	10:14		
LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
12.73	10.59	25.84	18.45	23.09	18.14	6.52	3.59		
0-2 cm	15.10	15.86	24.82	23.75	20.96	21.91	20.40	4.05	1.99
2-5 cm	14.15	13.75	25.23	19.96	22.38	19.50	5.04	2.63	
0-5 cm									
Corn									
Field#:	3	Date:	6/23/82	(Julian:	174)	Time:	15:00		
LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
21.22	24.51	23.96	26.60	23.83	24.62	24.12	1.73	0.72	
0-2 cm	19.82	23.79	24.69	27.97	24.54	25.81	24.44	2.69	1.10
2-5 cm	20.38	24.08	24.40	27.42	24.26	25.33	24.31	2.31	0.95
0-5 cm									
Corn									
Field#:	3	Date:	6/25/82	(Julian:	176)	Time:	12:55		
LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
14.98	14.92	16.42	18.00	16.62	19.62	16.76	1.81	1.08	
0-2 cm	18.57	17.33	17.94	17.49	17.71	20.23	18.21	1.08	0.59
2-5 cm	17.14	16.37	17.33	17.69	17.27	19.99	17.63	1.37	0.79
0-5 cm									
Corn									
Field#:	3	Date:	6/28/82	(Julian:	179)	Time:	14:20		
LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
23.86	22.02	23.56	25.68	21.98	20.42	22.92	1.84	0.80	
0-2 cm	22.26	22.26	23.10	22.57	20.81	21.81	22.13	0.78	0.35
2-5 cm	22.90	22.16	23.29	23.82	21.28	21.25	22.45	1.20	0.53
0-5 cm									
Corn									
Field#:	3	Date:	7/6/82	(Julian:	187)	Time:	10:51		
LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
17.18	8.63	14.00	7.17	8.55	11.07	11.10	3.83	3.45	
0-2 cm	19.51	16.35	19.39	10.70	14.55	9.59	15.01	4.23	2.82
2-5 cm	18.58	13.26	17.23	9.29	12.15	10.18	13.45	4.07	3.07
0-5 cm									

Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 8/ 2/82 (Julian: 214)	Time: 11:35	Mean	S D	S.D./Mean	Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 4 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 5/28/82 (Julian: 148)	Time: 15:52	Mean	S.D./Mean
Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 8/ 6/82 (Julian: 218)	Time: 13:10	Mean	S D	S.D./Mean	Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 4 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 6/ 2/82 (Julian: 153)	Time: 15:39	Mean	S.D./Mean
Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 8/16/82 (Julian: 228)	Time: 14:00	Mean	S D	S.D./Mean	Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 4 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 6/16/82 (Julian: 167)	Time: 14:10	Mean	S.D./Mean
Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 9/ 9/82 (Julian: 252)	Time: 10:00	Mean	S.D.	S.D./Mean	Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 4 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 6/18/82 (Julian: 169)	Time: 09:20	Mean	S.D./Mean
Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 3 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 9/16/82 (Julian: 259)	Time: 11:41	Mean	S.D.	S.D./Mean	Corn Depth 0-2 cm 2-5 cm 0-5 cm	Field#: 4 LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Date: 6/25/82 (Julian: 176)	Time: 14:10	Mean	S.D./Mean

Corn	Field#	4	Date: 6/28/82	(Julian: 179)	Time: 11:17				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D.	S D./Mean
0-2 cm	25.69	26.62	20.16	27.96	26.62	25.39	25.41	2.72	1.07
2-5 cm	23.33	23.08	20.01	25.66	26.51	24.32	23.82	2.29	0.96
0-5 cm	24.27	24.50	20.07	26.58	26.55	24.75	24.45	2.46	1.01
Corn	Field#	4	Date: 7/ 6/82	(Julian: 187)	Time: 14:37				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D.	S D./Mean
0-2 cm	13.46	16.68	10.68	9.12	9.76	11.94	3.12	2.62	
2-5 cm	17.76	8.37	17.40	17.19	16.78	15.50	4.00	2.58	
0-5 cm	16.04	11.69	14.71	13.96	13.97	14.08	3.65	2.60	
Corn	Field#	4	Date: 7/ 9/82	(Julian: 190)	Time: 09:55				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	-6.06	8.14	3.21	4.15	5.01	5.94	5.42	1.72	3.17
2-5 cm	11.57	4.60	9.90	10.18	10.79	11.89	9.82	2.67	2.72
0-5 cm	9.37	6.02	7.22	7.77	8.47	9.51	8.06	2.29	2.90
Corn	Field#	4	Date: 7/12/82	(Julian: 193)	Time: 13:17				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	16.98	16.66	19.33	19.07	25.28	24.88	20.37	3.81	1.87
2-5 cm	19.37	20.39	22.40	19.81	24.55	26.96	22.25	3.01	1.35
0-5 cm	18.41	18.90	21.17	19.51	24.85	26.13	21.50	3.33	1.56
Corn	Field#	4	Date: 7/13/82	(Julian: 194)	Time: 11:30				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S D./Mean
0-2 cm	22.55	27.14	17.59	24.95	11.47	20.74	6.28	3.03	
2-5 cm	22.78	22.82	18.57	23.54	18.85	22.74	21.55	2.22	1.03
0-5 cm	22.69	24.55	18.18	24.11	15.90	21.23	3.85	1.83	
Corn	Field#	4	Date: 7/15/82	(Julian: 196)	Time: 13 10				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
0-2 cm	11.91	15.22	15.18	19.64	28.50	21.46	18.65	5.92	3.17
2-5 cm	13.49	17.42	17.17	20.18	22.40	22.30	18.82	3.46	1.84
0-5 cm	12.85	16.54	16.37	19.96	24.84	21.97	18.76	4.44	2.37
Corn	Field#	4	Date: 7/19/82	(Julian: 200)	Time:				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S D./Mean
0-2 cm	3.58	3.18	3.93	4.70	8.95	6.94	5.21	2.27	4.35
2-5 cm	6.99	9.44	8.48	7.96	13.11	12.30	9.71	2.46	2.54
0-5 cm	5.62	6.94	6.66	6.66	11.45	10.16	7.91	2.38	3.26
Corn	Field#	4	Date: 7/19/82	(Julian: 200)	Time: 14:00				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D.	S.D./Mean
0-2 cm	8.51	5.29	7.16	5.50	10.40	7.37	2.14	2.91	1.15
2-5 cm	13.92	11.01	11.33	13.26	12.38	1.43	1.15	1.86	1.86
0-5 cm	11.76	8.72	9.00	9.00	10.38	1.71	1.86		

III.b.3-13

Corn	Field#	4	Date: 7/23/82	(Julian: 204)						Time: 14:20	
				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6	Mean <td>S D<td>S D./Mean</td></td>	S D <td>S D./Mean</td>	S D./Mean	
0-2 cm	7.82	5.97	5.95	6.00	12.11	9.13	7.83	2.46	3.14		
2-5 cm	13.14	12.50	9.16	10.25	13.13	14.15	12.05	1.93	1.60		
0-5 cm	11.01	9.89	7.87	8.55	12.72	12.14	10.37	2.14	2.22		
Corn	Field#	4	Date: 7/26/82	(Julian: 207)						Time: 15:00	
				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>LOC 6</td> <td>Mean<td>S D<td>S D./Mean</td></td></td>	LOC 5	LOC 6	LOC 6	Mean <td>S D<td>S D./Mean</td></td>	S D <td>S D./Mean</td>	S D./Mean	
0-2 cm	2.97	3.48	4.33	2.97	3.19	3.78	3.45	0.53	1.53		
2-5 cm	7.12	6.98	7.81	6.47	8.30	7.00	7.28	0.66	0.90		
0-5 cm	5.46	5.58	6.42	5.07	6.25	5.71	5.75	0.61	1.15		
Corn	Field#	4	Date: 7/28/82	(Julian: 209)						Time: 11:30	
				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>LOC 6</td> <td>Mean<td>S D<td>S D./Mean</td></td></td>	LOC 5	LOC 6	LOC 6	Mean <td>S D<td>S D./Mean</td></td>	S D <td>S D./Mean</td>	S D./Mean	
0-2 cm	9.54	7.94	7.37	14.00	8.49	3.78	8.52	3.32	3.90		
2-5 cm	8.04	7.00	6.91	9.56	8.43	7.00	7.82	1.06	1.36		
0-5 cm	8.64	7.38	7.09	11.34	8.45	5.71	8.10	1.97	2.37		
Corn	Field#	4	Date: 8/ 4/82	(Julian: 216)						Time: 11:25	
				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>LOC 6</td> <td>Mean<td>S D<td>S D./Mean</td></td></td>	LOC 5	LOC 6	LOC 6	Mean <td>S D<td>S D./Mean</td></td>	S D <td>S D./Mean</td>	S D./Mean	
0-2 cm	2.83	2.27	1.84	1.98	2.42	1.80	2.19	0.40	1.81		
2-5 cm	4.85	4.63	4.66	4.33	3.57	3.07	4.18	0.71	1.69		
0-5 cm	4.04	3.69	3.53	3.39	3.11	2.56	3.39	0.58	1.74		
Corn	Field#	4	Date: 8/ 9/82	(Julian: 221)						Time: 15:10	
				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>LOC 6</td> <td>Mean<th>S D</th><th>S D./Mean</th></td>	LOC 5	LOC 6	LOC 6	Mean <th>S D</th> <th>S D./Mean</th>	S D	S D./Mean	
0-2 cm	11.83	9.21	12.95	15.21	15.74	15.52	13.41	2.59	1.93		
2-5 cm	15.20	14.70	14.59	17.22	16.35	16.55	15.77	1.08	0.69		
0-5 cm	13.85	12.51	13.94	16.42	16.11	16.13	14.82	1.69	1.18		
Corn	Field#	4	Date: 8/16/82	(Julian: 228)						Time: 14:00	
				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>LOC 6</td> <td>Mean<th>S D</th><th>S D./Mean</th></td>	LOC 5	LOC 6	LOC 6	Mean <th>S D</th> <th>S D./Mean</th>	S D	S D./Mean	
0-2 cm	22.55	12.58	19.64	21.89	21.93	23.13	20.29	3.96	1.95		
2-5 cm	20.73	25.28	19.52	19.55	20.36	23.37	21.47	2.34	1.09		
0-5 cm	21.46	20.20	19.57	20.49	20.99	23.27	21.00	2.99	1.43		
Corn	Field#	5	Date: 5/21/82	(Julian: 141)						Time:	
				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>LOC 6</td> <td>Mean<th>S D</th><th>S D./Mean</th></td>	LOC 5	LOC 6	LOC 6	Mean <th>S D</th> <th>S D./Mean</th>	S D	S D./Mean	
0-2 cm	30.45	26.47	30.74	36.52	39.55	39.25	33.83	5.37	1.59		
2-5 cm	32.48	27.09	30.88	34.99	37.05	38.23	33.45	4.15	1.24		
0-5 cm	31.67	26.85	30.82	35.60	38.05	38.64	33.60	4.64	1.38		
Corn	Field#	5	Date: 5/28/82	(Julian: 148)						Time: 15:50	
				LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>LOC 6</td> <td>Mean<th>S D</th><th>S D./Mean</th></td>	LOC 5	LOC 6	LOC 6	Mean <th>S D</th> <th>S D./Mean</th>	S D	S D./Mean	
0-2 cm	18.43	23.08	17.13	32.16	23.52	26.35	23.45	5.47	2.33		
2-5 cm	23.35	22.44	22.12	26.73	23.77	22.80	23.53	1.68	0.71		
0-5 cm	21.38	22.69	20.12	28.91	23.67	24.22	23.50	3.20	1.36		

III b.3-14

Field#: 5 Date: 6/ 1/82 (Julian: 152) Time: 13:41									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	13.34	11.29	11.99	9.55	12.17	8.73	11.18	1.73	1.55
0-2 cm	22.87	21.40	23.90	19.53	13.20	20.18	4.23	2.10	1.88
0-5 cm	19.06	17.36	19.14	15.54	11.41	16.58	3.23	1.73	1.55
Field#: 5 Date: 7/ 9/82 (Julian: 190) Time: 09:50									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	6.44	4.55	5.82	4.60	2.21	3.11	4.45	1.59	3.57
0-2 cm	11.11	10.88	11.99	11.98	5.86	7.17	9.83	2.64	2.69
0-5 cm	9.24	8.35	9.52	9.02	4.40	5.55	7.68	2.22	3.04
Field#: 5 Date: 7/12/82 (Julian: 193) Time: 13:17									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	16.48	13.77	15.73	12.08	16.42	14.88	14.89	1.72	1.15
0-2 cm	19.77	17.70	17.05	16.85	19.87	18.26	18.25	1.32	0.72
0-5 cm	18.46	16.12	16.52	14.94	18.49	16.91	16.91	1.48	0.89
Field#: 5 Date: 7/13/82 (Julian: 194) Time: 11:30									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	20.62	17.68	23.02	20.26	23.86	18.16	20.60	2.49	1.21
0-2 cm	22.28	18.40	23.22	20.79	20.42	21.89	21.17	1.69	0.80
0-5 cm	21.61	18.11	23.14	20.58	21.79	20.39	20.94	2.01	0.96
Field#: 5 Date: 7/15/82 (Julian: 196) Time: 13:25									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	11.99	15.47	16.87	8.74	14.88	11.95	13.32	2.98	2.23
0-2 cm	18.80	19.56	20.63	15.28	14.65	16.24	17.53	2.47	1.41
0-5 cm	16.07	17.92	19.13	12.66	14.74	14.53	15.84	2.67	1.74
Field#: 5 Date: 7/19/82 (Julian: 200) Time: 14:25									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	7.47	4.95	5.67	3.98	4.82	3.02	4.98	1.52	3.05
0-2 cm	15.95	14.34	11.58	8.07	8.81	4.81	10.59	4.16	3.93
0-5 cm	12.56	10.58	9.22	6.43	7.22	4.09	8.35	3.11	3.58
Field#: 5 Date: 7/23/82 (Julian: 204) Time: 14:20									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	12.01	9.46	12.93	8.45	9.45	11.78	10.68	1.79	1.68
0-2 cm	17.53	14.28	18.66	13.32	14.77	17.43	16.00	2.15	1.35
0-5 cm	15.33	12.35	16.37	11.37	12.64	15.17	13.87	2.01	1.48
Field#: 5 Date: 7/26/82 (Julian: 207) Time: 15:11									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
Depth	4.05	4.57	5.94	3.52	2.07	2.78	3.82	1.37	3.57
0-2 cm	6.84	9.00	9.32	7.33	5.05	9.98	7.92	1.85	2.34
0-5 cm	5.73	7.23	7.97	5.81	3.86	7.10	6.28	1.66	2.83

Field#: 5 Date: 7/28/82 (Julian: 209) Time: 11:40									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean <td>S.D<th>S.D./Mean</th></td>	S.D <th>S.D./Mean</th>	S.D./Mean
0-2 cm	10.93	11.36	14.73	8.11	5.29	9.32	9.96	3.20	3.22
2-5 cm	10.23	9.68	10.26	5.49	7.87	9.98	8.92	1.90	2.13
0-5 cm	10.51	10.35	12.05	6.54	6.84	9.71	9.33	2.42	2.57
Field#: 5 Date: 8/ 4/82 (Julian: 216) Time: 11:41									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D<th>S.D./Mean</th></td></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D<th>S.D./Mean</th></td></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D<th>S.D./Mean</th></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S.D<th>S.D./Mean</th></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S.D<th>S.D./Mean</th></td></td></td>	LOC 6 <td>Mean<td>S.D<th>S.D./Mean</th></td></td>	Mean <td>S.D<th>S.D./Mean</th></td>	S.D <th>S.D./Mean</th>	S.D./Mean
0-2 cm	3.00	3.66	5.03	1.74	4.45	3.77	3.61	1.15	3.18
2-5 cm	4.15	3.42	2.97	4.16	2.45	1.31	3.08	1.09	3.55
0-5 cm	3.69	3.52	3.79	3.19	3.25	2.30	3.29	1.11	3.40
Field#: 5 Date: 8/ 9/82 (Julian: 221) Time: 15:20									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D</th><th>S.D./Mean</th></td>	Mean <th>S.D</th> <th>S.D./Mean</th>	S.D	S.D./Mean
0-2 cm	11.14	11.09	10.28	12.91	11.13	13.18	11.62	1.15	0.99
2-5 cm	14.64	17.32	14.01	15.76	14.90	15.72	15.39	1.15	0.75
0-5 cm	13.24	14.83	12.52	14.62	13.39	14.70	13.88	1.15	0.85
Field#: 5 Date: 8/16/82 (Julian: 228) Time: 13:45									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D</th><th>S.D./Mean</th></td>	Mean <th>S.D</th> <th>S.D./Mean</th>	S.D	S.D./Mean
0-2 cm	18.69	20.29	23.69	22.50	20.88	21.76	21.30	1.75	0.82
2-5 cm	19.28	18.65	20.36	22.01	20.08	21.43	20.30	1.27	0.62
0-5 cm	19.04	19.30	21.69	22.21	20.40	21.56	20.70	1.46	0.70
Field#: 6 Date: 5/21/82 (Julian: 141) Time: 10:50									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D</th><th>S.D./Mean</th></td>	Mean <th>S.D</th> <th>S.D./Mean</th>	S.D	S.D./Mean
0-2 cm	18.01	17.26	20.18	22.19	18.03	16.88	18.76	2.03	1.08
2-5 cm	18.22	19.07	15.66	20.35	19.71	18.25	18.55	1.64	0.88
0-5 cm	18.14	18.35	17.47	21.09	19.04	17.70	18.63	1.80	0.96
Field#: 6 Date: 5/24/82 (Julian: 144) Time: 10:10									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D</th><th>S.D./Mean</th></td>	Mean <th>S.D</th> <th>S.D./Mean</th>	S.D	S.D./Mean
0-2 cm	7.79	9.58	7.21	15.45	13.40	14.56	11.33	3.59	3.17
2-5 cm	14.58	14.66	14.62	16.48	15.96	16.90	15.53	1.04	0.67
0-5 cm	11.86	12.63	11.65	16.07	14.94	15.96	13.85	2.06	1.67
Field#: 6 Date: 5/28/82 (Julian: 148) Time: 10:10									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D</th><th>S.D./Mean</th></td>	Mean <th>S.D</th> <th>S.D./Mean</th>	S.D	S.D./Mean
0-2 cm	18.57	17.26	25.75	17.25	20.39	19.85	3.55	1.79	1.79
2-5 cm	15.20	16.23	17.94	16.81	23.45	11.04	16.78	4.04	2.41
0-5 cm	16.55	17.67	20.39	20.97	14.78	18.00	3.84	2.16	2.16
Field#: 6 Date: 6/ 1/82 (Julian: 152) Time: 13:24									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D</th><th>S.D./Mean</th></td>	Mean <th>S.D</th> <th>S.D./Mean</th>	S.D	S.D./Mean
0-2 cm	25.21	18.83	16.12	22.46	19.15	19.31	20.18	3.18	1.58
2-5 cm	22.54	18.40	15.03	21.21	19.60	19.04	19.30	2.58	1.34
0-5 cm	23.61	18.57	15.47	21.71	19.42	19.15	19.65	2.82	1.43
Field#: 6 Date: 6/25/82 (Julian: 176) Time: 15:15									
Corn	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
Depth	LOC 1 <td>LOC 2<td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td></td>	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td></td>	LOC 5 <td>LOC 6<td>Mean<th>S.D</th><th>S.D./Mean</th></td></td>	LOC 6 <td>Mean<th>S.D</th><th>S.D./Mean</th></td>	Mean <th>S.D</th> <th>S.D./Mean</th>	S.D	S.D./Mean
0-2 cm	14.50	19.16	15.58	18.76	18.11	14.51	16.77	2.15	1.28
2-5 cm	16.57	19.35	16.15	18.70	20.22	17.68	18.11	1.60	0.88
0-5 cm	15.74	19.27	15.92	18.72	19.38	16.42	17.57	1.82	1.04

Corn	Field#:	6	Date: 6/28/82 (Julian: 179)	Time: 11:05										
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean					
0-2 cm	19	14	22.85	24	20	27	36	24	28	24.94	23.79	2.72	1.14	
2-5 cm	18.67	21.45	24	34	26.70	25.62	25.50	23	71	3.06	1.29			
0-5 cm	18.86	22.01	24.28	26	96	25.09	25.28	23.75	2.92	1.23				
Corn	Field#:	6	Date: 7/ 6/82 (Julian: 187)	Time: 14:00										
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean					
0-2 cm	4	92	4	90	4.48	5.67	7.34	5	46	1.13	2.08			
2-5 cm	9.42	7.23	9.58	12.07	9.81	14.26	10.39	2	44	2.34				
0-5 cm	7.62	7.71	9.03	8.16	11.49	8	42	1.91	2.24					
Corn	Field#:	6	Date: 7/ 7/82 (Julian: 188)	Time: 15:10										
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean					
0-2 cm	6	63	5.50	2.15	7.25	3.52	9.58	5.77	2	67	4.63			
2-5 cm	13	67	4	51	12.17	12	14	14.58	11.41	4.00	3.50			
0-5 cm	10	40	3	57	10.20	8	69	12.58	9	16	3	47	3.95	
Corn	Field#:	6	Date: 7/12/82 (Julian: 193)	Time: 11:18										
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean					
0-2 cm	9.17	12.38	12.98	16.29	15.19	14	51	13	42	2	53	1.88		
2-5 cm	10.34	20	50	13.13	14.36	20.73	14.68	15	62	4	16	2.66		
0-5 cm	9.87	17.25	13.07	15.13	18.52	14.61	14.74	3	51	2.35				
Corn	Field#:	6	Date: 7/13/82 (Julian: 194)	Time: 10:50										
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean					
0-2 cm	20.44	24	82	19	62	20	20	15.92	19.38	20.06	2	85	1.42	
2-5 cm	19.55	21.52	18.44	19.05	16	65	19.34	19.09	1	58	0.83			
0-5 cm	19	91	22.84	18	91	19.51	16.36	19.36	19.48	2	09	1	07	
Corn	Field#:	6	Date: 7/15/82 (Julian: 196)	Time: 13:24										
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean					
0-2 cm	12	59	11.82	12.17	14	34	11.38	9.67	12.00	1	53	1	27	
2-5 cm	13	86	14	36	13.61	16	05	14	36	9	09	13.56	2.35	
0-5 cm	13.35	13.35	13	03	15.37	13.17	9.33	12.93	2	02	1.55			
Corn	Field#:	6	Date: 7/19/82 (Julian: 200)	Time: 14:10										
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean					
0-2 cm	1.43	4.95	1	98	6	74	2.48	1.84	3	24	2.12	6.56		
2-5 cm	5	01	7	43	6.39	7.71	9.75	5.81	7	02	1.67	2.39		
0-5 cm	3	58	6	44	4.63	7.32	6.84	4.22	5	51	1.85	4	05	
Corn	Field#:	6	Date: 7/23/82 (Julian: 204)	Time: 14:00										
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean					
0-2 cm	7.70	8.81	6.72	8.65	6.49	7.53	7.65	0	96	1.25				
2-5 cm	12	69	15	36	10	80	11.94	11.95	10.81	12.26	1	69	1	37
0-5 cm	10	69	12.74	9.17	10.62	9	77	9	50	10.42	1.39	1.33		

III b 3-19

Corn	Field#:	6	Date: 7/26/82 (Julian: 207)	Time: 15:10					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.98	2.06	2.32	2.72	2.51	3.73	2.72	0.59	2.17
2-5 cm	5.33	3.90	4.73	10.18	7.87	8.64	6.78	2.48	3.66
0-5 cm	4.39	3.16	3.77	7.20	5.73	6.68	5.15	1.72	3.06
Corn	Field#:	6	Date: 7/28/82 (Julian: 209)	Time: 10:40					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.59	13.74	10.66	8.81	11.15	11.03	10.66	1.87	1.76
2-5 cm	9.03	13.84	10.21	11.37	11.15	12.88	11.41	1.75	1.53
0-5 cm	8.86	13.80	10.39	10.35	11.15	12.14	11.11	1.80	1.62
Corn	Field#:	6	Date: 7/30/82 (Julian: 211)	Time: 14:37					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6.11	6.57	5.22	7.05	8.78	5.34	6.51	1.32	2.02
2-5 cm	14.02	13.81	11.62	10.16	14.45	10.29	12.39	1.94	1.57
0-5 cm	10.86	10.92	9.06	8.92	12.18	8.31	10.04	1.69	1.75
Corn	Field#:	6	Date: 8/ 4/82 (Julian: 216)	Time: 10:38					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	1.73	1.68	1.32	2.20	2.11	2.22	1.88	0.36	1.92
2-5 cm	2.57	2.33	2.66	3.80	5.85	3.13	3.39	1.31	3.87
0-5 cm	2.24	2.07	2.13	3.16	4.35	2.77	2.79	0.93	3.09
Corn	Field#:	6	Date: 8/ 9/82 (Julian: 221)	Time: 14:30					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	10.41	9.57	5.50	6.55	3.32	9.77	7.52	2.84	3.77
2-5 cm	10.86	10.94	10.14	9.56	12.58	10.21	10.72	1.05	0.98
0-5 cm	10.68	10.39	8.28	8.36	8.88	10.04	9.44	1.76	2.10
Corn	Field#:	6	Date: 8/16/82 (Julian: 228)	Time: 15:00					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	15.02	15.30	15.74	14.51	14.84	15.67	15.18	0.48	0.32
2-5 cm	13.98	14.10	14.85	14.28	13.96	14.36	14.25	0.33	0.23
0-5 cm	14.40	14.58	15.20	14.37	14.31	14.88	14.62	0.39	0.27
Corn	Field#:	6	Date: 9/ 9/82 (Julian: 252)	Time: 11:50					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13.77	12.29	13.81	13.33	11.59	10.25	12.51	1.41	1.13
2-5 cm	13.70	13.33	14.17	14.98	9.97	12.24	13.06	1.77	1.35
0-5 cm	13.73	12.91	14.03	14.32	10.62	11.44	12.84	1.62	1.26
Corn	Field#:	6	Date: 9/16/82 (Julian: 259)	Time: 13:50					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14.17	15.93	11.67	10.64	13.64	13.36	13.24	1.87	1.42
2-5 cm	14.36	15.12	13.66	13.52	13.99	14.51	14.14	0.66	0.47
0-5 cm	14.29	15.45	12.68	12.37	13.85	14.05	13.78	1.15	0.85

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Corn		Field#:	7	Date:	5/19/82 (Julian: 139)	Time:	S.D. S.D./Mean		Field#:	7	Date:	6/25/82 (Julian: 176)	Time:	S.D. S.D./Mean					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	24.56	18.44	25.93	27.60	25.41	22.35	24.05	3.25	1.35	0-2 cm	17.13	21.02	22.68	23.01	22.15	24.39	21.73	2.51	1.15
2-5 cm	37.23	38.78	34.65		41.35	41.77	38.76	2.96	0.76	2-5 cm	27.18	29.55	30.95	30.90	30.05	32.62	30.21	1.81	0.60
0-5 cm	32.16	30.64	31.16		34.97	34.00	32.87	3.07	1.00	0-5 cm	23.16	26.14	27.64	27.74	26.89	29.32	26.82	2.09	0.82
Corn		Field#:	7	Date:	5/21/82 (Julian: 141)	Time:	S.D. S.D./Mean		Field#:	7	Date:	6/28/82 (Julian: 179)	Time:	S.D. S.D./Mean					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	32.88	29.78	31.24	39.91	29.91	34.22	32.99	3.80	1.15	0-2 cm	25.32	27.77	30.11	29.23	33.35	28.73	29.09	2.66	0.91
2-5 cm	35.25	36.48	37.59	42.96	36.20	36.78	37.54	2.76	0.74	2-5 cm	30.04	31.15	35.30	33.43	35.22	41.89	34.51	4.19	1.22
0-5 cm	34.31	33.80	35.05	41.74	33.69	35.75	35.72	3.18	0.90	0-5 cm	28.15	29.80	33.23	31.75	34.47	36.63	32.34	3.58	1.09
Corn		Field#:	7	Date:	6/1/82 (Julian: 152)	Time:	S.D. S.D./Mean		Field#:	7	Date:	7/7/82 (Julian: 188)	Time:	S.D. S.D./Mean					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	37.13	36.34	37.40	44.47	37.38	44.86	39.60	3.95	1.00	0-2 cm	5.61	4.01	5.91	5.48	6.67	5.00	5.45	0.89	1.64
2-5 cm	37.03	42.50	38.01	41.68	37.21	40.76	39.53	2.40	0.61	2-5 cm	13.10	9.93	10.00	10.11	6.44	10.22	9.97	2.12	2.12
0-5 cm	37.07	40.04	37.77	42.79	37.28	42.40	39.56	3.02	0.76	0-5 cm	10.10	7.57	8.36	8.26	6.53	8.13	8.16	1.63	1.93
Corn		Field#:	7	Date:	6/2/82 (Julian: 153)	Time:	S.D. S.D./Mean		Field#:	7	Date:	7/9/82 (Julian: 190)	Time:	S.D. S.D./Mean					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	35.48	40.84	40.37	53.75	45.60	45.12	43.53	6.22	1.43	0-2 cm	5.75	6.07	9.01	6.18	7.78	6.96	1.39	2.00	
2-5 cm	35.20	35.36	43.00	56.48	44.89	50.05	44.16	8.32	1.88	2-5 cm	7.75	13.87	10.44	12.81	11.72	15.42	12.00	2.70	2.25
0-5 cm	35.31	37.55	41.95	55.39	45.17	48.08	43.91	7.48	1.70	0-5 cm	6.95	10.75	11.29	9.50	12.37	9.98	2.18	2.15	
Corn		Field#:	7	Date:	6/4/82 (Julian: 155)	Time:	S.D. S.D./Mean		Field#:	7	Date:	7/12/82 (Julian: 193)	Time:	S.D. S.D./Mean					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	38.22	36.53	39.62	47.03	39.47	41.17	40.34	3.63	0.90	0-2 cm	9.11	18.12	13.11	13.43	19.01	16.64	14.90	3.72	2.50
2-5 cm	40.92	38.69	43.78	45.42	41.42	42.28	42.08	2.34	0.56	2-5 cm	24.35	24.02	25.08	29.81	29.85	30.71	27.30	3.12	1.14
0-5 cm	39.84	37.82	42.12	46.06	40.64	41.83	41.39	2.85	0.69	0-5 cm	18.25	21.66	20.29	23.26	25.52	25.08	22.34	3.36	1.69
Corn		Field#:	7	Date:	6/7/82 (Julian: 158)	Time:	S.D. S.D./Mean		Field#:	7	Date:	7/13/82 (Julian: 194)	Time:	S.D. S.D./Mean					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	32.97	36.62	21.56	37.77	23.87	30.56	7.42	2.43	0.76	0-2 cm	30.48	29.00	30.45	37.76	35.63	37.73	33.51	3.98	1.19
2-5 cm	36.27	40.27	33.37	40.50	38.78	40.59	38.30	2.92	0.76	2-5 cm	30.16	29.72	30.66	36.76	36.98	37.00	33.55	3.70	1.10
0-5 cm	34.95	34.67	32.92	38.38	33.90	35.20	4.72	1.43	0.98	0-5 cm	30.29	29.43	30.57	37.16	36.44	37.29	33.53	3.81	1.14
Corn		Field#:	7	Date:	6/16/82 (Julian: 167)	Time:	S.D. S.D./Mean		Field#:	7	Date:	7/15/82 (Julian: 196)	Time:	S.D. S.D./Mean					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	27.25	31.15	29.87	35.38	25.71	27.54	29.48	3.48	1.18	0-2 cm	21.27	23.90	23.00	27.89	26.87	23.87	24.47	2.47	1.01
2-5 cm	33.35	33.25	35.77	38.62	35.25	40.96	36.20	3.05	0.84	2-5 cm	25.92	26.84	27.09	30.39	29.12	28.46	27.97	1.65	0.59
0-5 cm	30.91	32.41	33.41	37.32	31.43	35.60	33.51	3.22	0.98	0-5 cm	24.06	25.66	25.45	29.39	28.22	26.62	26.57	1.98	0.76
Corn		Field#:	7	Date:	6/21/82 (Julian: 172)	Time:	S.D. S.D./Mean		Field#:	7	Date:	7/23/82 (Julian: 204)	Time:	S.D. S.D./Mean					
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.07	17.26	22.71	21.51	22.96	22.75	21.55	2.17	1.01	0-2 cm	17.32	11.72	14.11	14.72	20.05	19.80	16.29	3.33	2.05
2-5 cm	30.76	27.54	31.99	36.61	33.15	32.96	32.17	2.99	0.93	2-5 cm	20.89	15.61	20.11	22.28	23.34	25.17	21.23	3.29	1.55
0-5 cm	27.29	23.43	28.28	30.57	29.08	28.88	27.92	2.66	0.96	0-5 cm	19.46	14.06	17.71	19.26	22.02	23.02	19.26	3.31	1.75

Corn	Field#: 7		Date: 7/26/82 (Julian: 207)				Time: 11:05		S.D.	S.D./Mean
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
0-2 cm	8 63	7 12	8 68	11 35	10 74	4 00	8 42	2.66	3 15	
2-5 cm	11 56	11 24	14 77	15 89	13 01	16 93	13 90	2.33	1 68	
0-5 cm	10 39	9 59	12 33	14 07	12 10	11 76	11 71	2 46	2 27	
Corn	Field#: 7		Date: 7/28/82 (Julian: 209)				Time: 14:15		S.D.	S.D./Mean
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.		
Depth	LOC 1	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td>	LOC 6 <td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td>	Mean <td>S.D.</td> <td>S.D./Mean</td> <td></td>	S.D.	S.D./Mean	
0-2 cm	5 90	5 18	7 35	7 45	6 88	7 65	6 73	0 99	1 46	
2-5 cm	15 05	10 26	10 47	13 99	13 55	17 91	13 54	2 89	2 14	
0-5 cm	11 39	8 23	9 22	11 37	10 88	13 81	10 81	2 13	1 87	
Corn	Field#: 7		Date: 7/30/82 (Julian: 211)				Time: 09:50		S.D.	S.D./Mean
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.		
Depth	LOC 1	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td>	LOC 6 <td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td>	Mean <td>S.D.</td> <td>S.D./Mean</td> <td></td>	S.D.	S.D./Mean	
0-2 cm	6 79	6 99	7 10	7 01	7 69	8 28	7 31	0 56	0 77	
2-5 cm	11 23	12 73	12 39	14 87	14 11	18 25	13 93	2 48	1 78	
0-5 cm	9 45	10 44	10 27	11 73	11 54	14 26	11 28	1 71	1 38	
Corn	Field#: 7		Date: 8/ 2/82 (Julian: 214)				Time: 10:52		S.D.	S.D./Mean
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.		
Depth	LOC 1	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td>	LOC 6 <td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td>	Mean <td>S.D.</td> <td>S.D./Mean</td> <td></td>	S.D.	S.D./Mean	
0-2 cm	14 88	13 17	14 24	14 75	16 21	13 94	14 53	1 03	0 71	
2-5 cm	13 23	17 53	17 54	14 90	21 41	24 81	18 24	4 25	2 33	
0-5 cm	13 89	15 79	16 22	14 84	19 33	20 46	16 76	2 96	1 68	
Corn	Field#: 7		Date: 8/ 3/82 (Julian: 215)				Time: 11:55		S.D.	S.D./Mean
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.		
Depth	LOC 1	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td>	LOC 6 <td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td>	Mean <td>S.D.</td> <td>S.D./Mean</td> <td></td>	S.D.	S.D./Mean	
0-2 cm	6 28	5 61	7 16	7 70	8 72	7 76	7 20	1 12	1 55	
2-5 cm										
0-5 cm										
Corn	Field#: 7		Date: 8/ 4/82 (Julian: 216)				Time: 14 48		S.D.	S.D./Mean
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.		
Depth	LOC 1	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td>	LOC 6 <td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td>	Mean <td>S.D.</td> <td>S.D./Mean</td> <td></td>	S.D.	S.D./Mean	
0-2 cm	3 30	4 24	4 44	7 91	9 00	7 14	6 01	2 31	3 85	
2-5 cm	9 94	10 10	10 33	15 06	13 39	14 84	12 27	2 43	1 98	
0-5 cm	7 28	7 76	7 97	12 20	11 63	11 76	9 77	2 38	2 73	
Corn	Field#: 7		Date: 8/ 9/82 (Julian: 221)				Time: 10:00		S.D.	S.D./Mean
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.		
Depth	LOC 1	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td>	LOC 6 <td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td>	Mean <td>S.D.</td> <td>S.D./Mean</td> <td></td>	S.D.	S.D./Mean	
0-2 cm	25 00	23 52	24 83	28 08	29 23	33 02	27 28	3 54	1 30	
2-5 cm	23 83	25 23	25 86	30 05	27 77	32 55	27 55	3 27	1 19	
0-5 cm	24 30	24 55	25 45	29 26	28 35	32 74	27 44	3 38	1 23	
Corn	Field#: 7		Date: 8/18/82 (Julian: 230)				Time: 12:48		S.D.	S.D./Mean
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.		
Depth	LOC 1	LOC 2 <td>LOC 3<td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td></td>	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td></td>	LOC 6 <td>Mean<td>S.D.</td><td>S.D./Mean</td><td></td></td>	Mean <td>S.D.</td> <td>S.D./Mean</td> <td></td>	S.D.	S.D./Mean	
0-2 cm	20 32	21 24	28 65	29 84	16 27	23 35	23 28	5 18	2 22	
2-5 cm	24 97	26 42	29 74	28 11	26 31	26 99	27 09	1 65	0 61	
0-5 cm	23 11	24 35	29 31	28 80	22 30	25 53	25 56	3 06	1 26	

III.b 3-23

Corn	Field#: 7		Date: 9/ 2/82 (Julian: 245)		Time: 15:55		S.D.	S.D./Mean	
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6			Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	29 39	31 60	29 52	31 69	32 49	28 84	30 59	1 51	0 49
2-5 cm	29 83	32 24	32 24	36 15	33 95	33 05	32 91	2 10	0 64
0-5 cm	29 65	31 99	31 15	34 36	33 37	31 37	31 98	1 86	0 58
Corn	Field#: 7		Date: 9/ 9/82 (Julian: 252)		Time: 13:20		S.D.	S.D./Mean	
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6			Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>Mean</td> <td>S.D.</td> <td>S.D./Mean</td>	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19 83	26 18	26 09	31 15	25 89	26 53	25 94	3 60	1 39
2-5 cm	24 31	30 33	32 60	34 67	33 39	30 87	31 03	3 66	1 18
0-5 cm	22 52	28 67	29 99	33 26	30 39	29 14	28 99	3 64	1 26
Corn	Field#: 7		Date: 9/16/82 (Julian: 259)		Time:		S.D.	S.D./Mean	
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6			Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>Mean</td> <td>S.D.</td> <td>S.D./Mean</td>	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22 78	21 62	25 48	31 58	14 30	25 59	23 56	5 69	2 42
2-5 cm	29 20	28 26	20 09	35 44	34 34	35 05	30 39	5 91	1 95
0-5 cm	26 63	25 60	22 24	33 89	26 32	31 26	27 66	5 83	2 13
Corn	Field#: 8		Date: 5/19/82 (Julian: 139)		Time: 15:10		S.D.	S.D./Mean	
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6			Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>Mean</td> <td>S.D.</td> <td>S.D./Mean</td>	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21 65	22 14	23 68	21 52	17 84	21 37	21 37	2 15	1 01
2-5 cm	32 84	31 04	34 24	33 91	30 71	30 95	32 28	1 59	0 49
0-5 cm	28 37	27 48	30 02	28 96	25 56	27 92	27 92	1 81	0 70
Corn	Field#: 8		Date: 5/21/82 (Julian: 141)		Time:		S.D.	S.D./Mean	
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6			Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>Mean</td> <td>S.D.</td> <td>S.D./Mean</td>	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	23 56	27 25	25 39	28 88	20 30	26 13	25 25	3 01	1 19
2-5 cm	35 14	31 10	32 08	31 58	30 94	28 82	31 61	2 06	0 65
0-5 cm	30 51	29 56	29 40	30 50	26 69	27 74	29 07	2 44	0 87
Corn	Field#: 8		Date: 5/26/82 (Julian: 146)		Time: 10:37		S.D.	S.D./Mean	
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6			Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>Mean</td> <td>S.D.</td> <td>S.D./Mean</td>	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	38 11	43 97	36 44	36 88	35 47	38 59	38 24	3 03	0 79
2-5 cm	36 42	38 53	34 36	34 16	22 67	37 84	33 99	5 83	1 71
0-5 cm	37 10	40 71	35 19	35 25	27 79	38 14	35 69	4 71	1 34
Corn	Field#: 8		Date: 6/ 1/82 (Julian: 152)		Time: 09:55		S.D.	S.D./Mean	
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6			Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>Mean</td> <td>S.D.</td> <td>S.D./Mean</td>	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	35 99	34 86	50 00	39 75	44 25	40 97	6 24	1 52	
2-5 cm	32 65	35 10	32 44	39 05	32 97	35 53	34 62	2 53	0 73
0-5 cm	33 99	35 00	39 46	39 33	37 48	37 16	4 02	1 05	
Corn	Field#: 8		Date: 6/ 2/82 (Julian: 153)		Time: 15:01		S.D.	S.D./Mean	
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6			Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4 <td>LOC 5</td> <td>LOC 6</td> <td>Mean</td> <td>S.D.</td> <td>S.D./Mean</td>	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	30 33	29 81	33 08	29 29	30 71	30 64	1 46	0 48	
2-5 cm	31 22	30 78	29 63	34 28	30 53	32 02	31 41	1 61	0 51
0-5 cm	30 87	29 70	33 80	30 03	31 50	31 10	1 55	0 50	

III.b.3-24

Corn	Field#:	8	Date: 8/ 9/82 (Julian: 221)	Time: 10:20			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	20 13	25.83	18.92	29.78	28.26	28.05	25.16 4.56 1.81
2-5 cm	19.49	27.82	23.30	27.36	27.57	28.37	25.65 3.53 1.37
0-5 cm	19.75	27.02	21.55	28.33	27.85	28.24	25.46 3.94 1.55
Corn	Field#:	8	Date: 8/18/82 (Julian: 230)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	21.02	23.23	25.35	24.40	24.95	23.79	1.74 0.73
2-5 cm	25.05	26.54	26.00	25.12	25.74	23.84	25.38 0.94 0.37
0-5 cm	23.44	25.22	25.74	24.83	24.28	24.74	1.26 0.51
Corn	Field#:	9	Date: 5/19/82 (Julian: 139)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	15.93	13.15	10.08	16.51	14.58	18.33	14.76 2.89 1.96
2-5 cm	22.92	20.73	23.42	22.73	22.18	24.93	22.82 1.39 0.61
0-5 cm	20.12	17.69	18.08	20.24	19.14	22.29	19.60 1.99 1.15
Corn	Field#:	9	Date: 5/26/82 (Julian: 146)	Time: 10:58			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	36.07	37.54	39.27	29.05	27.61	32.16	33.62 4.74 1.41
2-5 cm	32.09	34.07	36.84	28.48	27.69	25.85	30.84 4.20 1.36
0-5 cm	33.68	35.46	37.81	28.71	27.66	28.37	31.95 4.42 1.38
Corn	Field#:	9	Date: 6/ 1/82 (Julian: 152)	Time: 10:16			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	31.74	31.33	35.02	30.69	26.50	29.48	30.79 2.80 0.91
2-5 cm	29.88	33.15	36.07	28.72	25.72	27.86	30.23 3.77 1.25
0-5 cm	30.62	32.43	35.65	29.50	26.04	28.51	30.46 3.38 1.11
Corn	Field#:	9	Date: 6/ 2/82 (Julian: 153)	Time: 15:19			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	26.30	30.51	32.55	29.22	23.61	23.41	27.60 3.76 1.36
2-5 cm	25.48	30.68	28.71	26.28	24.93	24.61	26.78 2.41 0.90
0-5 cm	25.81	30.61	30.25	27.46	24.41	24.13	27.11 2.95 1.08
Corn	Field#:	9	Date: 6/ 4/82 (Julian: 155)	Time: 10:04			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	36.08	32.99	33.66	28.84	30.97	30.56	32.18 2.58 0.80
2-5 cm	33.64	36.43	36.65	28.10	21.75	29.85	31.07 5.72 1.84
0-5 cm	34.62	35.05	35.45	28.40	25.44	30.14	31.52 4.46 1.43
Corn	Field#:	9	Date: 6/ 7/82 (Julian: 158)	Time: 14:21			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	27.38	32.01	32.33	25.50	22.48	23.25	27.16 4.25 1.56
2-5 cm	27.55	31.49	25.78	25.66	23.26	26.15	26.65 2.75 1.03
0-5 cm	27.48	31.70	28.40	25.59	22.95	24.99	26.85 3.35 1.24

III.b.3-27

Corn	Field#:	9	Date: 6/14/82 (Julian: 165)	Time: 10:40			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	24.86	17.88	25.22	20.70	20.59	16.36	20.94 3.58 1.71
2-5 cm	26.54	21.94	26.97	20.98	23.44	19.54	23.23 3.01 1.30
0-5 cm	25.87	20.32	26.27	20.87	22.30	18.27	22.32 3.24 1.46
Corn	Field#:	9	Date: 6/16/82 (Julian: 167)	Time: 14:52			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	27.10	30.93	29.53	29.63	22.46	24.93	27.43 3.24 1.18
2-5 cm	27.72	29.16	28.65	28.23	23.95	24.61	27.05 2.21 0.82
0-5 cm	27.47	29.87	29.00	28.79	23.36	24.74	27.21 2.62 0.96
Corn	Field#:	9	Date: 6/21/82 (Julian: 172)	Time: 11:16			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	12.83	18.25	13.58	22.63	18.91	21.24	17.91 3.98 2.22
2-5 cm	20.57	28.09	19.40	26.06	23.53	26.76	24.07 3.51 1.46
0-5 cm	17.47	24.16	17.07	24.69	21.68	24.55	21.60 3.70 1.76
Corn	Field#:	9	Date: 6/25/82 (Julian: 176)	Time: 10:10			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	15.54	18.69	19.77	21.22	16.67	21.34	18.87 2.38 1.26
2-5 cm	21.07	25.25	22.74	23.38	22.01	23.10	22.93 1.41 0.62
0-5 cm	18.86	22.63	21.55	22.52	19.88	22.40	21.30 1.80 0.87
Corn	Field#:	9	Date: 6/28/82 (Julian: 179)	Time: 13:00			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	18.49	25.40	20.61	29.35	25.44	26.78	24.34 4.04 1.66
2-5 cm	25.99	28.29	25.55	27.70	27.06	25.65	26.71 1.15 0.43
0-5 cm	22.99	27.14	23.58	28.36	26.41	26.10	25.76 2.30 0.92
Corn	Field#:	9	Date: 7/ 2/82 (Julian: 183)	Time: 10:35			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	13.88	14.53	11.59	12.18	14.24	15.89	13.72 1.59 1.16
2-5 cm	19.40	21.89	20.89	19.76	15.41	18.78	19.35 2.23 1.15
0-5 cm	17.19	18.95	17.17	16.73	14.94	17.63	17.10 1.97 1.15
Corn	Field#:	9	Date: 7/ 7/82 (Julian: 188)	Time: 11:35			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	2.53	1.96	2.49	4.23	3.00	3.43	2.94 0.81 2.74
2-5 cm	13.51	8.82	13.66	13.90	7.88	12.19	11.66 2.65 2.27
0-5 cm	9.12	6.08	9.19	10.03	5.93	8.69	8.17 1.91 2.46
Corn	Field#:	9	Date: 7/ 9/82 (Julian: 190)	Time: 15:21			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean S.D. S.D./Mean
0-2 cm	4.05	6.67	7.12	8.15	6.95	6.36	6.55 1.37 2.09
2-5 cm	6.47	15.17	12.17	14.13	14.78	10.74	12.24 3.29 2.69
0-5 cm	5.50	11.77	10.15	11.74	11.65	8.99	9.97 2.52 2.45

III.b.3-28

Corn	Field#: 9				Date: 7/12/82 (Julian: 193)				Time: 15:15				S.D.	S.D./Mean	Corn	Field#: 9				Date: 8/ 4/82 (Julian: 216)				Time: 14:47			
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	LOC 1	LOC 2	LOC 3	LOC 4				LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	16.98	14.02	16.77	12.70	15.08	15.03	15.10	1.63	1.08	1.39	1.80	1.39	0.31	0.39	1.06	0.66	6.29										
0-2 cm	17.58	21.01	18.12	21.07	19.10	19.38	1.61	0.83	2.46	3.21	1.95	2.17	0.86	2.13	0.86	4.02											
2-5 cm	16.16	19.31	15.95	18.67	17.47	17.67	1.62	0.93																			
0-5 cm																											
Corn	Field#: 9				Date: 7/13/82 (Julian: 194)				Time: 15:30				S.D.	S.D./Mean	Corn	Field#: 9				Date: 8/ 9/82 (Julian: 221)				Time: 10:05			
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	LOC 1	LOC 2	LOC 3	LOC 4				LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	24.46	19.89	20.06	20.95	14.62	23.79	20.63	3.51	1.70	18.00	15.27	22.12	16.38	21.88	21.86	19.25	3.09	1.60									
0-2 cm	22.77	20.76	22.56	19.41	21.15	19.52	21.03	1.44	0.68	19.93	14.78	22.80	15.41	21.32	19.65	18.98	3.22	1.70									
2-5 cm	23.44	20.41	21.56	20.03	18.54	21.23	20.87	2.27	1.09	19.16	14.97	22.53	15.80	21.55	20.53	19.09	3.17	1.66									
0-5 cm																											
Corn	Field#: 9				Date: 7/15/82 (Julian: 196)				Time: 10:12				S.D.	S.D./Mean	Corn	Field#: 9				Date: 8/18/82 (Julian: 230)				Time: 12:42			
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	LOC 1	LOC 2	LOC 3	LOC 4				LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	13.58	19.10	13.05	21.66	20.32	16.45	17.36	3.58	2.06	16.31	18.82	20.67	24.28	24.12	27.50	21.95	4.10	1.87									
0-2 cm	19.59	22.78	18.72	23.66	20.98	18.50	20.70	2.15	1.04	18.55	19.93	22.47	23.89	26.11	22.52	22.25	2.71	1.22									
2-5 cm	17.19	21.30	16.45	22.86	20.72	17.68	19.37	2.72	1.45	17.66	19.49	21.75	24.05	25.31	24.51	22.13	3.27	1.48									
0-5 cm																											
Corn	Field#: 9				Date: 7/23/82 (Julian: 204)				Time: 10:10				S.D.	S.D./Mean	Corn	Field#: 9				Date: 9/ 2/82 (Julian: 245)				Time:			
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	LOC 1	LOC 2	LOC 3	LOC 4				LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	7.59	7.79	9.54	9.48	15.79	8.36	9.76	3.07	3.14	23.11	21.61	25.57	27.30	28.08	26.65	25.39	2.53	1.00									
0-2 cm	8.06	11.29	12.11	16.78	14.85	12.62	3.36	2.66	2.5 cm	24.20	23.79	27.01	25.32	25.62	25.54	25.25	1.15	0.45									
2-5 cm	7.88	9.89	11.08	16.39	12.25	11.48	3.24	2.85	0-5 cm	23.76	22.91	26.44	26.11	26.60	25.98	25.30	1.70	0.67									
0-5 cm																											
Corn	Field#: 9				Date: 7/26/82 (Julian: 207)				Time: 11:30				S.D.	S.D./Mean	Corn	Field#: 10				Date: 5/19/82 (Julian: 139)				Time: 16:31			
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	LOC 1	LOC 2	LOC 3	LOC 4				LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	9.64	10.38	10.40	9.80	9.68	9.98	0.38	0.38	0-2 cm	24.19	28.33	25.54	29.00	23.43	31.30	26.97	3.07	1.14									
0-2 cm	17.77	15.53	15.03	13.85	16.68	13.72	15.43	1.59	1.03	2-5 cm	25.64	20.65	26.55	26.24	24.89	27.31	25.21	2.38	0.94								
2-5 cm	14.52	13.47	13.18	12.23	12.10	13.25	1.11	0.77	0-5 cm	25.06	23.72	26.15	27.35	24.30	28.90	25.91	2.65	1.02									
0-5 cm																											
Corn	Field#: 9				Date: 7/28/82 (Julian: 209)				Time: 14:35				S.D.	S.D./Mean	Corn	Field#: 10				Date: 5/26/82 (Julian: 146)				Time: 09:48			
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	LOC 1	LOC 2	LOC 3	LOC 4				LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	2.45	3.50	3.67	3.58	2.34	3.35	3.15	0.59	1.88	LOC 1 <th>LOC 2</th> <th>LOC 3</th> <th>LOC 4</th> <th>LOC 5</th> <th>LOC 6</th> <th>Mean</th> <th>S.D.</th> <th>S.D./Mean</th>	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean									
0-2 cm	6.00	5.66	7.30	6.51	5.37	7.61	6.41	0.90	1.40	0-2 cm	30.33	32.54	31.81	31.37	31.65	32.43	31.69	0.80	0.25								
2-5 cm	4.58	4.79	5.85	5.34	4.16	5.91	5.10	0.78	1.60	2-5 cm	34.12	33.12	30.84	33.17	32.80	34.33	33.06	1.24	0.38								
0-5 cm										0-5 cm	32.61	32.89	31.23	32.45	32.34	33.57	32.51	1.07	0.33								
Corn	Field#: 9				Date: 8/ 2/82 (Julian: 214)				Time: 10:38				S.D.	S.D./Mean	Corn	Field#: 10				Date: 6/ 1/82 (Julian: 152)				Time: 10:55			
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	LOC 1	LOC 2	LOC 3	LOC 4				LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	12.89	11.28	12.98	12.80	15.16	10.91	12.67	1.51	1.19	LOC 1 <th>LOC 2</th> <th>LOC 3</th> <th>LOC 4</th> <th>LOC 5</th> <th>LOC 6</th> <th>Mean</th> <th>S.D.</th> <th>S.D./Mean</th>	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean									
0-2 cm	17.78	18.25	12.85	14.17	11.31	14.61	14.83	2.73	1.84	0-2 cm	29.48	37.36	28.49	28.81	31.00	32.23	31.23	3.32	1.06								
2-5 cm	15.83	15.46	12.90	13.63	12.85	13.13	13.97	2.24	1.58	2-5 cm	28.54	33.60	28.44	28.81	29.84	31.61	30.14	2.07	0.69								
0-5 cm										0-5 cm	28.92	35.11	28.46	28.81	30.30	31.85	30.58	2.57	0.84								
Corn	Field#: 9				Date: 8/ 3/82 (Julian: 215)				Time: 11:50				S.D.	S.D./Mean	Corn	Field#: 10				Date: 6/ 4/82 (Julian: 155)				Time: 10:56			
	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	LOC 1	LOC 2	LOC 3	LOC 4				LOC 5	LOC 6	Mean	S.D.	S.D./Mean							
Depth	4.71	4.87	5.67	5.37	5.46	4.89	5.16	0.39	0.75	LOC 1 <th>LOC 2</th> <th>LOC 3</th> <th>LOC 4</th> <th>LOC 5</th> <th>LOC 6</th> <th>Mean</th> <th>S.D.</th> <th>S.D./Mean</th>	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean									
0-2 cm	7.78	8.14	5.90	11.98	5.99	5.98	7.63	2.35	3.08	0-2 cm	29.78	28.06	28.86	25.78	27.88	27.95	28.05	1.33	0.47								
2-5 cm	6.55	6.83	5.81	9.34	5.78	5.54	6.64	1.57	2.15	2-5 cm	32.27	28.60	28.71	29.78	28.95	29.13	29.57	1.38	0.47								
0-5 cm										0-5 cm	31.27	28.38	28.77	28.18	28.52	28.66	28.96	1.36	0.47								

Field#:10		Date: 6/ 7/82 (Julian: 158)		Time: 12:00		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	28.91	32.44	23.16	38.15	28.70	33.02	30.73	5.06	1.65
2-5 cm	33.58	28.61	31.24	29.18	31.14	30.75	1.97	0.64	
0-5 cm	33.13	26.43	34.00	28.99	31.89	30.74	3.20	1.04	
Field#:10		Date: 6/ 9/82 (Julian: 160)		Time: 13:20		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	28.12	31.83	28.27	31.63	30.80	30.98	30.27	1.66	0.55
2-5 cm	30.02	33.02	29.59	33.05	29.29	32.08	31.17	1.74	0.56
0-5 cm	29.26	32.54	29.06	32.48	29.89	31.64	30.81	1.71	0.55
Field#:10		Date: 6/14/82 (Julian: 165)		Time: 10:13		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	20.23	22.07	20.07	25.95	25.54	31.28	24.19	4.30	1.78
2-5 cm	25.40	22.33	23.98	24.73	25.90	26.74	24.85	1.56	0.63
0-5 cm	23.33	22.23	22.42	25.22	25.76	28.56	24.58	2.65	1.09
Field#:10		Date: 6/16/82 (Julian: 167)		Time: 15:30		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	25.63	29.06	26.08	32.82	29.12	25.81	28.09	2.82	1.00
2-5 cm	29.83	28.01	26.07	30.49	27.92	26.44	28.13	1.77	0.63
0-5 cm	28.15	28.43	26.07	31.42	28.40	26.19	28.11	2.19	0.78
Field#:10		Date: 6/18/82 (Julian: 169)		Time: 14:10		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	28.06	25.88	27.99	37.02	28.89	31.51	29.89	3.94	1.32
2-5 cm	20.81	25.96	26.67	29.71	28.51	29.75	26.90	3.36	1.25
0-5 cm	23.71	25.93	27.20	32.63	28.66	30.45	28.10	3.59	1.28
Field#:10		Date: 6/21/82 (Julian: 172)		Time: 11:50		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	23.79	23.61	24.57	29.55	26.98	24.00	25.42	2.37	0.93
2-5 cm	19.70	22.62	25.69	26.61	19.10	23.21	22.82	3.04	1.33
0-5 cm	21.33	23.02	25.24	27.78	22.25	23.53	23.86	2.78	1.17
Field#:10		Date: 6/25/82 (Julian: 176)		Time: 09:32		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	22.65	23.84	30.54	25.59	30.02	27.58	26.70	3.24	1.21
2-5 cm	26.32	22.87	27.66	26.86	16.03	27.46	24.53	4.52	1.84
0-5 cm	24.85	23.26	28.81	26.35	21.63	27.51	25.40	4.00	1.59
Field#:10		Date: 6/28/82 (Julian: 179)		Time: 15:35		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	21.44	23.06	20.98	25.11	27.44	27.53	24.26	2.89	1.19
2-5 cm	21.11	20.29	23.44	25.04	25.79	26.42	23.68	2.53	1.07
0-5 cm	21.24	21.40	22.45	25.07	26.45	26.87	23.91	2.67	1.12

III.b.3-31

Field#:10		Date: 7/ 2/82 (Julian: 183)		Time: 10:13		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	25.49	22.22	22.22	24.69	22.24	21.40	22.67	23.12	1.60
2-5 cm	24.29	21.82	23.91	21.89	20.81	22.96	22.61	1.34	0.59
0-5 cm	24.77	21.98	24.22	22.03	21.05	22.84	22.81	1.45	0.63
Field#:10		Date: 7/ 7/82 (Julian: 188)		Time: 11:00		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	8.58	5.50	6.61	5.11	4.96			6.15	1.50
2-5 cm	12.67	9.84	14.65	11.96	10.35	15.21	12.45	2.19	1.76
0-5 cm	11.03	8.11	11.44	9.22	8.19			9.93	2.03
Field#:10		Date: 7/ 9/82 (Julian: 190)		Time: 15:31		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	7.23	5.62	6.48	9.50	7.05	8.88	7.46	1.47	1.97
2-5 cm	8.34	10.61	10.36	13.71	5.49	12.88	10.23	3.01	2.94
0-5 cm	7.90	8.61	8.81	12.03	6.11	11.28	9.12	2.39	2.55
Field#:10		Date: 7/12/82 (Julian: 193)		Time:		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	17.43	17.01	18.58	24.00	19.37	27.79	20.70	4.28	2.07
2-5 cm	19.00	18.78	20.49	23.31	20.07	23.85	20.91	2.17	1.04
0-5 cm	18.37	18.07	19.73	23.59	19.79	25.42	20.83	3.01	1.45
Field#:10		Date: 7/13/82 (Julian: 194)		Time: 15:12		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	26.14	22.59	23.57	29.60	26.39	23.42	25.29	2.62	1.04
2-5 cm	25.60	22.98	24.91	27.73	25.27	24.03	25.09	1.60	0.64
0-5 cm	25.82	22.83	24.37	28.48	25.72	23.79	25.17	2.01	0.80
Field#:10		Date: 7/15/82 (Julian: 196)		Time: 10:51		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	19.76	18.87	27.02	29.88	27.90	19.90	23.89	4.90	2.05
2-5 cm	20.52	21.59	25.24	24.81	26.98	20.60	23.29	2.74	1.18
0-5 cm	20.22	20.50	25.95	26.84	27.35	20.32	23.53	3.60	1.53
Field#:10		Date: 7/23/82 (Julian: 204)		Time: 10:40		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	8.63	14.27	21.45	17.01	14.29	15.73	15.23	4.18	2.75
2-5 cm	14.16	15.26	18.02	9.59	13.92	17.02	14.66	2.96	2.02
0-5 cm	11.95	14.86	19.39	12.56	14.07	16.51	14.89	3.45	2.31
Field#:10		Date: 7/26/82 (Julian: 207)		Time: 12:00		S.D		S.D./Mean	
Corn	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D
0-2 cm	6.78	7.33	8.63	7.17	6.68	7.32	0.78	1.07	
2-5 cm	14.58	11.17	11.24	13.67	10.50	11.20	12.06	1.65	1.37
0-5 cm	9.42	9.67	11.66	9.17	9.39	10.16	1.30	1.25	

III b 3-32

APPENDIX III.c

GROUND-TRUTH DATA - SOYBEANS

1. Soybean Vegetation Data
2. Plant Density Data
3. Soil Moisture Data

III.c

Appendix III.c.1

Soybean Vegetation Data

Soybean Field # 1 Date: 7/12/82(Julian: 193)
Time: 10:10 Mean Canopy Height: 9.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 1 Date: 7/13/82(Julian: 194)
Time: Mean Canopy Height: 11.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 1 Date: 7/15/82(Julian: 196)
Time: 10:42 Mean Canopy Height: 14.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.31
Dry Biomass Density:
Plant Water Density:

Soybean Field # 1 Date: 7/23/82(Julian: 204)
Time: 13:25 Mean Canopy Height: 17.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.81 1.37 1.03 1.07
Dry Biomass Density:
Plant Water Density:

Soybean Field # 1 Date: 7/27/82(Julian: 208)
Time: 14:00 Mean Canopy Height: 22.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density: 1.91

Soybean Field # 1 Date: 7/28/82(Julian: 209)
Time: 10:15 Mean Canopy Height: 20.4 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.07 1.76 1.46 1.43
Dry Biomass Density:
Plant Water Density:

III.c.1-1

Soybean Field # 1 Date: 7/30/82(Julian: 211)
Time: 10:50 Mean Canopy Height: 26.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.83 1.37 1.14 1.11
Dry Biomass Density:
Plant Water Density:

Soybean Field # 1 Date: 8/ 2/82(Julian: 214)
Time: 13:50 Mean Canopy Height: 24.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 80.26
Dry Biomass Density: 0.60
Plant Water Density: 0.12 0.48

Soybean Field # 1 Date: 8/ 6/82(Julian: 218)
Time: 10:35 Mean Canopy Height: 34.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.52 2.94 2.33 2.26
Dry Biomass Density:
Plant Water Density:

Soybean Field # 1 Date: 8/ 9/82(Julian: 221)
Time: 09:55 Mean Canopy Height: 43.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 77.55 81.71 81.24 80.88
Wet Biomass Density: 0.74 2.13 1.96 1.61
Dry Biomass Density: 0.17 0.39 0.37 0.31
Plant Water Density: 0.57 1.74 1.59 1.30

Soybean Field # 1 Date: 8/13/82(Julian: 225)
Time: 14:50 Mean Canopy Height: 50.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 1 Date: 8/16/82(Julian: 228)
Time: 13:48 Mean Canopy Height: 57.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 81.57 84.49 82.65 83.08
Wet Biomass Density: 1.30 2.25 2.81 2.12
Dry Biomass Density: 0.24 0.35 0.49 0.36
Plant Water Density: 1.06 1.90 2.32 1.76

III.c.1-2

Soybean Field # 1 Date: 8/18/82(Julian: 230)
Time: 12:15 Mean Canopy Height: 64.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 1.45 2.31 2.07 1.94
Wet Biomass Density: 1.15 2.53 2.77 2.15
Dry Biomass Density: 0.35 0.71 0.79 0.62
Plant Water Density: 0.80 1.82 1.98 1.53

Soybean Field # 1 Date: 8/31/82(Julian: 243)
Time: 13:45 Mean Canopy Height: 80.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 1.56 3.06 4 28 2.97
Wet Biomass Density: 1.56 3.06 4 28 2.97
Dry Biomass Density: 0.59 0.96 0.74 0.76
Plant Water Density: 0.74 1.29 1.00 1.01

Soybean Field # 1 Date: 9/ 2/82(Julian: 245)
Time: 14:40 Mean Canopy Height: 88.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 74.35 80.04 79 87 78.76
Wet Biomass Density: 1.42 2.33 2.97 2.24
Dry Biomass Density: 0.36 0.46 0.60 0.48
Plant Water Density: 1.06 1.86 2.37 1.76

Soybean Field # 1 Date: 9/ 9/82(Julian: 252)
Time: 09:25 Mean Canopy Height: 81.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 78.38 80.89 79.28 79 71
Wet Biomass Density: 1.86 3.75 4.66 3.42
Dry Biomass Density: 0.40 0.72 0.97 0.69
Plant Water Density: 1.46 3.04 3.70 2.73

Soybean Field # 1 Date: 9/16/82(Julian: 259)
Time: 10:40 Mean Canopy Height: 91.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 74.63 78 27 75 81 76 59
Wet Biomass Density: 2.36 5.24 5.42 4.34
Dry Biomass Density: 0.60 1.14 1.31 1.02
Plant Water Density: 1.76 4.10 4.11 3.33

Soybean Field # 1 Date: 9/23/82(Julian: 266)
Time: 13:30 Mean Canopy Height: 92.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 71 88 74.90 72.93 73 55
Wet Biomass Density: 3.86 7.13 5.12 5.37
Dry Biomass Density: 1.09 1.79 1.39 1.42
Plant Water Density: 2.78 5.34 3.73 3.95

III.c 1-3

Soybean Field # 1 Date: 9/28/82(Julian: 271)
Time: 10:45 Mean Canopy Height: 83.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 69.74 71.95 71.41 71.32
Wet Biomass Density: 1.15 2.53 2.77 2.15
Dry Biomass Density: 0.35 0.71 0.79 0.62
Plant Water Density: 0.80 1.82 1.98 1.53

Soybean Field # 1 Date: 9/30/82(Julian: 273)
Time: 11:15 Mean Canopy Height: 83.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 1.56 3.06 4 28 2.97
Wet Biomass Density: 1.56 3.06 4 28 2.97
Dry Biomass Density: 0.59 0.96 0.74 0.76
Plant Water Density: 0.74 1.29 1.00 1.01

Soybean Field # 1 Date: 10/ 5/82(Julian: 278)
Time: 15:00 Mean Canopy Height: 84.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 55.72 57.44 57.67 57.08
Wet Biomass Density: 1.33 2.25 1.74 1.77
Dry Biomass Density: 0.59 0.96 0.74 0.76
Plant Water Density: 0.74 1.29 1.00 1.01

Soybean Field # 1 Date: 10/ 7/82(Julian: 280)
Time: 10:00 Mean Canopy Height: 81.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 1.86 2.24 1.86 1.99
Wet Biomass Density: 1.86 2.24 1.86 1.99
Dry Biomass Density: 0.59 0.96 0.74 0.76
Plant Water Density: 0.74 1.29 1.00 1.01

Soybean Field # 1 Date: 10/12/82(Julian: 285)
Time: 10:00 Mean Canopy Height: 81.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 39.07 41.92 46 86 42.30
Wet Biomass Density: 0.65 1.09 0.56 0.76
Dry Biomass Density: 0.40 0.63 0.29 0.44
Plant Water Density: 0.25 0.46 0.26 0.32

Soybean Field # 1 Date: 10/14/82(Julian: 287)
Time: 10:00 Mean Canopy Height: 80.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 0.61 0.89 0.64 0.72
Wet Biomass Density: 0.61 0.89 0.64 0.72
Dry Biomass Density: 0.25 0.46 0.26 0.32
Plant Water Density: 0.25 0.46 0.26 0.32

III.c.1-4

Soybean Field # 1 Date: 10/19/82(Julian: 292)
Time: 10:40 Mean Canopy Height: 83.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.55 0.97 0.90 0.81
Dry Biomass Density:
Plant Water Density:

Soybean Field # 1 Date: 10/21/82(Julian: 294)
Time: 10:45 Mean Canopy Height: 78.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.51 0.79 0.86 0.72
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 7/26/82(Julian: 207)
Time: 14:05 Mean Canopy Height: 20.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.80
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 7/28/82(Julian: 209)
Time: 15:45 Mean Canopy Height: 22.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.92 1.06 1.17 1.05
Dry Biomass Density: 0.36
Plant Water Density: 0.56

Soybean Field # 2 Date: 7/30/82(Julian: 211)
Time: 13:30 Mean Canopy Height: 22.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.21 0.86 1.01 0.70
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 8/ 2/82(Julian: 214)
Time: 14:37 Mean Canopy Height: 30.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.98 2.06 1.42 1.82
Dry Biomass Density: 0.41 0.31 0.25 0.32
Plant Water Density: 1.57 1.76 1.17 1.50

Soybean Field # 2 Date: 8/ 6/82(Julian: 218)
Time: 11:57 Mean Canopy Height: 39.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.26 1.87 1.53 1.55
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 8/ 9/82(Julian: 221)
Time: 13:24 Mean Canopy Height: 45.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 79.26 84.26 84.69 83.45
Dry Biomass Density: 1.06 2.21 2.13 1.80
Plant Water Density: 0.22 0.35 0.33 0.30

Soybean Field # 2 Date: 8/11/82(Julian: 223)
Time: 14:00 Mean Canopy Height: 43.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 8/13/82(Julian: 225)
Time: 14:35 Mean Canopy Height: 51.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 8/16/82(Julian: 228)
Time: 10:54 Mean Canopy Height: 59.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 80.76 87.58 89.03 87.02
Dry Biomass Density: 1.12 2.93 2.64 2.23
Plant Water Density: 0.21 0.36 0.29 0.29

Soybean Field # 2 Date: 8/18/82(Julian: 230)
Time: 14:20 Mean Canopy Height: 67.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.43 2.23 2.30 1.99
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 9/ 2/82(Julian: 245)
Time: Mean Canopy Height: 100.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 78.99 85.57
Wet Biomass Density: 1.84 3.31 3.21 2.79
Dry Biomass Density: 0.39 0.48
Plant Water Density: 1.45 2.84

Soybean Field # 2 Date: 9/ 9/82(Julian: 252)
Time: 10:10 Mean Canopy Height: 100.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 78.61 82.42 79.27 80.44
Wet Biomass Density: 2.33 4.10 3.30 3.24
Dry Biomass Density: 0.50 0.72 0.68 0.63
Plant Water Density: 1.83 3.38 2.61 2.61

Soybean Field # 2 Date: 9/16/82(Julian: 259)
Time: 12:40 Mean Canopy Height: 97.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 76.61 79.88 77.44 78.23
Wet Biomass Density: 2.04 3.58 3.26 2.96
Dry Biomass Density: 0.48 0.72 0.74 0.64
Plant Water Density: 1.56 2.86 2.52 2.31

Soybean Field # 2 Date: 9/23/82(Julian: 266)
Time: 14:35 Mean Canopy Height: 94.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 71.95 76.60 74.94 74.90
Wet Biomass Density: 2.48 4.22 4.13 3.61
Dry Biomass Density: 0.70 0.99 1.04 0.91
Plant Water Density: 1.78 3.23 3.10 2.70

Soybean Field # 2 Date: 9/28/82(Julian: 271)
Time: 10:00 Mean Canopy Height: 94.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 71.74 75.05 74.53 74.21
Wet Biomass Density: 1.63 2.97 4.75 3.11
Dry Biomass Density: 0.46 0.74 1.21 0.80
Plant Water Density: 1.17 2.23 3.54 2.31

Soybean Field # 2 Date: 9/30/82(Julian: 273)
Time: Mean Canopy Height: 93.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 3.25 2.42 3.69 3.12
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III.c.1-7

Soybean Field # 2 Date: 10/ 5/82(Julian: 278)
Time: 14:00 Mean Canopy Height: 92.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 70.17 70.55 68.98 69.76
Wet Biomass Density: 2.00 3.15 4.23 3.13
Dry Biomass Density: 0.60 0.93 1.31 0.95
Plant Water Density: 1.40 2.22 2.92 2.18

Soybean Field # 2 Date: 10/ 7/82(Julian: 280)
Time: 10:26 Mean Canopy Height: 95.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.91 4.50 4.22 3.54
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 10/12/82(Julian: 285)
Time: 12:35 Mean Canopy Height: 92.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 55.14 57.90 56.05 56.53
Wet Biomass Density: 1.19 1.59 1.04 1.27
Dry Biomass Density: 0.53 0.67 0.46 0.55
Plant Water Density: 0.65 0.92 0.58 0.72

Soybean Field # 2 Date: 10/14/82(Julian: 287)
Time: 10:45 Mean Canopy Height: 93.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.33 2.12 1.47 1.64
Dry Biomass Density:
Plant Water Density:

Soybean Field # 2 Date: 10/19/82(Julian: 292)
Time: 11:25 Mean Canopy Height: 89.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 19.00 19.80 39.34 28.17
Wet Biomass Density: 0.65 1.02 1.30 0.99
Dry Biomass Density: 0.52 0.82 0.79 0.71
Plant Water Density: 0.12 0.20 0.51 0.28

Soybean Field # 2 Date: 10/21/82(Julian: 294)
Time: 11:40 Mean Canopy Height: 88.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 14.10 19.84 35.42 24.30
Wet Biomass Density: 0.89 1.25 1.32 1.16
Dry Biomass Density: 0.77 1.01 0.85 0.88
Plant Water Density: 0.13 0.25 0.47 0.28

III.c.1-8

Soybean Field # 2 Date: 10/26/82(Julian: 299)
Time: 11:00 Mean Canopy Height: 91.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 9.07 18.24 26.29 17.44
Wet Biomass Density: 0.73 0.92 0.60 0.75
Dry Biomass Density: 0.66 0.75 0.45 0.62
Plant Water Density: 0.07 0.17 0.16 0.13

Soybean Field # 3 Date: 6/18/82(Julian: 169)
Time: 13:40 Mean Canopy Height: 14.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 3 Date: 6/21/82(Julian: 172)
Time: 10:10 Mean Canopy Height: 16.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 3 Date: 6/23/82(Julian: 174)
Time: 15:00 Mean Canopy Height: 14.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 3 Date: 6/25/82(Julian: 176)
Time: 13:10 Mean Canopy Height: 20.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 3 Date: 6/28/82(Julian: 179)
Time: 14:10 Mean Canopy Height: 25.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 80 74
Wet Biomass Density: 1.24
Dry Biomass Density: 0.24
Plant Water Density: 1.00

III.c.1-9

Soybean Field # 3 Date: 6/30/82(Julian: 181)
Time: Mean Canopy Height: 27.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 3 Date: 7/ 6/82(Julian: 187)
Time: 10:41 Mean Canopy Height: 31.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 85.45
Wet Biomass Density: 1.34
Dry Biomass Density: 0.19
Plant Water Density: 1.14

Soybean Field # 3 Date: 7/ 7/82(Julian: 188)
Time: 14:42 Mean Canopy Height: 35.4 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 1.78
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 3 Date: 7/12/82(Julian: 193)
Time: 09:45 Mean Canopy Height: 41.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 87.03
Wet Biomass Density: 3.09
Dry Biomass Density: 0.40
Plant Water Density: 2.69

Soybean Field # 3 Date: 7/13/82(Julian: 194)
Time: 14:10 Mean Canopy Height: 49.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.14
Dry Biomass Density:
Plant Water Density:

Soybean Field # 3 Date: 7/15/82(Julian: 196)
Time: 14:45 Mean Canopy Height: 53.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III.c.1-10

Soybean Field # 3	Date: 7/19/82(Julian. 200)	Soybean Field # 3	Date: 8/ 6/82(Julian: 218)
Time: 11:30	Mean Canopy Height: 63.7 cm	Time: 11:47	Mean Canopy Height: 89.7 cm
Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant	Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:	80.73 84.57 83.26 83.11	% Plant Moisture:	
Wet Biomass Density:	1.55 2.34 1.67 1.85	Wet Biomass Density:	2.04 3.06 2.81 2.64
Dry Biomass Density:	0.30 0.36 0.28 0.31	Dry Biomass Density:	
Plant Water Density:	1.25 1.98 1.39 1.54	Plant Water Density:	

Soybean Field # 3	Date: 7/23/82(Julian. 204)	Soybean Field # 3	Date: 8/ 9/82(Julian: 221)
Time: 14:20	Mean Canopy Height: 69.5 cm	Time: 13:20	Mean Canopy Height: 91.2 cm
Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant	Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:		% Plant Moisture:	77.86 79.78 77.21 78.43
Wet Biomass Density:		Wet Biomass Density:	2.59 3.50 2.63 2.91
Dry Biomass Density:		Dry Biomass Density:	0.57 0.71 0.60 0.63
Plant Water Density:		Plant Water Density:	2.02 2.80 2.03 2.28

Soybean Field # 3	Date: 7/26/82(Julian: 207)	Soybean Field # 3	Date: 8/11/82(Julian: 223)
Time: 14:00	Mean Canopy Height: 76.8 cm	Time: 13:10	Mean Canopy Height: 98.2 cm
Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant	Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:	78.42 79.75 78.56 78.97	% Plant Moisture:	
Wet Biomass Density:	1.72 2.29 1.96 1.99	Wet Biomass Density:	
Dry Biomass Density:	0.37 0.46 0.42 0.42	Dry Biomass Density:	
Plant Water Density:	1.35 1.83 1.54 1.57	Plant Water Density:	

Soybean Field # 3	Date: 7/28/82(Julian: 209)	Soybean Field # 3	Date: 8/13/82(Julian: 225)
Time: 15:43	Mean Canopy Height: 78.7 cm	Time: 14:35	Mean Canopy Height: 96.0 cm
Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant	Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:	75 11	% Plant Moisture:	
Wet Biomass Density:	2.26 4.39 5.90 4.18	Wet Biomass Density:	
Dry Biomass Density:	1.47	Dry Biomass Density:	
Plant Water Density:	4.43	Plant Water Density:	

Soybean Field # 3	Date: 7/30/82(Julian: 211)	Soybean Field # 3	Date: 8/16/82(Julian: 228)
Time: 13:30	Mean Canopy Height: 85.8 cm	Time: 11:00	Mean Canopy Height: 98.8 cm
Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant	Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:		% Plant Moisture:	77.45 80.25 78.47 79.00
Wet Biomass Density:	1.58 2.78 2.18 2.18	Wet Biomass Density:	2.20 4.37 3.85 3.47
Dry Biomass Density:		Dry Biomass Density:	0.50 0.86 0.83 0.73
Plant Water Density:		Plant Water Density:	1.71 3.50 3.02 2.74

Soybean Field # 3	Date: 8/ 2/82(Julian: 214)	Soybean Field # 3	Date: 8/18/82(Julian: 230)
Time: 14:50	Mean Canopy Height: 85.0 cm	Time: 14:40	Mean Canopy Height: 98.0 cm
Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant	Plant Parts:	Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:	75.22 78.20 75.64 76.52	% Plant Moisture:	
Wet Biomass Density:	2.76 2.78 1.19 2.24	Wet Biomass Density:	1.79 3.49 4.95 3.41
Dry Biomass Density:	0.68 0.61 0.29 0.53	Dry Biomass Density:	
Plant Water Density:	2.08 2.17 0.90 1.72	Plant Water Density:	

Soybean Field # 3 Date: 9/ 2/82(Julian: 245)
Time: 14:20 Mean Canopy Height: 98.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 70 93 75.52 72 46 73.22
Wet Biomass Density: 2.05 3.35 4 00 3 13
Dry Biomass Density: 0 60 0.82 1.10 0.84
Plant Water Density: 1.45 2 53 2.90 2.29

Soybean Field # 3 Date: 9/ 9/82(Julian: 252)
Time: 09:45 Mean Canopy Height: 105.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 70.76 71.65 70 32 70.91
Wet Biomass Density: 4.04 4.58 4 70 4.44
Dry Biomass Density: 1.18 1.30 1.39 1.29
Plant Water Density: 2.86 3.28 3.30 3 15

Soybean Field # 3 Date: 9/16/82(Julian: 259)
Time: 12:17 Mean Canopy Height: 99 7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 64.13 65.59 65.28 65.14
Wet Biomass Density: 2 29 3.81 3 94 3 35
Dry Biomass Density: 0 82 1.31 1 37 1 17
Plant Water Density: 1.47 2.50 2 57 2 18

Soybean Field # 3 Date: 9/23/82(Julian: 266)
Time: 14:25 Mean Canopy Height: 104 0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 31.28 33.77 39 21 35.25
Wet Biomass Density: 0.92 2.01 1 68 1.54
Dry Biomass Density: 0.63 1.33 1.02 1.00
Plant Water Density: 0.29 0 68 0.66 0.54

Soybean Field # 3 Date: 9/28/82(Julian: 271)
Time: 10:15 Mean Canopy Height: 100.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 18.19 22.60
Wet Biomass Density: 1.30 2.14 1.64 1 69
Dry Biomass Density: 1.06 1.66
Plant Water Density: 0.24 0.48

Soybean Field # 3 Date: 9/30/82(Julian: 273)
Time: Mean Canopy Height: 98 5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III c.1-13

Soybean Field # 3 Date: 10/ 5/82(Julian: 278)
Time: 14:00 Mean Canopy Height: 99 2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 10.24 12.04 10.95 11.19
Wet Biomass Density: 0.88 1.36 1 40 1.21
Dry Biomass Density: 0.79 1.19 1.25 1.07
Plant Water Density: 0.09 0.16 0 15 0.14

Soybean Field # 3 Date: 10/12/82(Julian: 285)
Time: 12:33 Mean Canopy Height: 93 5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 8.34 11.37 12.43 10.87
Wet Biomass Density: 1.05 1.55 1.19 1.26
Dry Biomass Density: 0.96 1.38 1.05 1.13
Plant Water Density: 0.09 0.18 0.15 0.14

Soybean Field # 4 Date: 6/21/82(Julian: 172)
Time: Mean Canopy Height: 6.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 6/25/82(Julian: 176)
Time: 13.25 Mean Canopy Height: 9.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 6/28/82(Julian: 179)
Time: 14:00 Mean Canopy Height: 14 0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 6/30/82(Julian: 181)
Time: Mean Canopy Height: 16 2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III.c 1-14

Soybean Field # 4 Date: 7/ 6/82(Julian: 187)
Time: 11:10 Mean Canopy Height: 25.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 84 55
Wet Biomass Density: 1 29
Dry Biomass Density: 0.20
Plant Water Density: 1.09

Soybean Field # 4 Date: 7/ 7/82(Julian: 188)
Time: 14:10 Mean Canopy Height: 29 0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 1 29
Wet Biomass Density: 1 29
Dry Biomass Density: 0.37
Plant Water Density: 2.62

Soybean Field # 4 Date: 7/12/82(Julian: 193)
Time: 09:30 Mean Canopy Height: 32.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 87.61
Wet Biomass Density: 2 99
Dry Biomass Density: 0 37
Plant Water Density: 2.62

Soybean Field # 4 Date: 7/13/82(Julian: 194)
Time: 14:10 Mean Canopy Height: 35 5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 83.41
Wet Biomass Density: 2.50
Dry Biomass Density: 0 42
Plant Water Density: 2.09

Soybean Field # 4 Date: 7/15/82(Julian: 196)
Time: 14:30 Mean Canopy Height: 44.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 7/19/82(Julian: 200)
Time: 11:15 Mean Canopy Height: 51.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 80.03 83.79 83 22 82.45
Wet Biomass Density: 1.77 1 99 2 13 1 96
Dry Biomass Density: 0.35 0.32 0 36 0 34
Plant Water Density: 1.42 1.66 1 77 1.62

III c.1-15

Soybean Field # 4 Date: 7/23/82(Julian: 204)
Time: 14:20 Mean Canopy Height: 55.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 2.19 2.30 1.79 2.09
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 7/26/82(Julian: 207)
Time: 13:54 Mean Canopy Height: 57 0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 77.76 82.94 79 67 80.32
Wet Biomass Density: 1.88 2 38 2 18 2 15
Dry Biomass Density: 0.42 0.41 0.44 0.42
Plant Water Density: 1 46 1 98 1.74 1.72

Soybean Field # 4 Date: 7/28/82(Julian: 209)
Time: 15:35 Mean Canopy Height: 62.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 2 22 3.04 2.81 2.69
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 7/30/82(Julian: 211)
Time: 13:15 Mean Canopy Height: 66.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.73 2.31 1.35 1.80
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 8/ 6/82(Julian: 218)
Time: 11:36 Mean Canopy Height: 85 8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 2.16 2 25 1.47 1.96
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 8/ 9/82(Julian: 221)
Time: 13:10 Mean Canopy Height: 87.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 77 21 73 37 85.41 79.33
Wet Biomass Density: 2 13 2 41 3.11 2.55
Dry Biomass Density: 0 49 0.64 0 45 0.53
Plant Water Density: 1.65 1.77 2 65 2 02

III.c.1-16

Soybean Field # 4 Date: 8/11/82(Julian: 223)
Time: 13:18 Mean Canopy Height: 90.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 8/13/82(Julian: 225)
Time: 14:20 Mean Canopy Height: 97.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 8/16/82(Julian: 228)
Time: 10:40 Mean Canopy Height: 98.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 8/19/82(Julian: 231)
Time: Mean Canopy Height: 97.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 9/2/82(Julian: 245)
Time: 14:15 Mean Canopy Height: 101.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 9/9/82(Julian: 252)
Time: 09:30 Mean Canopy Height: 112.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III c 1-17

Soybean Field # 4 Date: 9/16/82(Julian: 259)
Time: 12:00 Mean Canopy Height: 110.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 9/23/82(Julian: 266)
Time: 14:25 Mean Canopy Height: 100.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 9/28/82(Julian: 271)
Time: 09:50 Mean Canopy Height: 102.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 9/30/82(Julian: 273)
Time: Mean Canopy Height: 106.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 10/5/82(Julian: 278)
Time: 13:40 Mean Canopy Height: 100.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 4 Date: 10/12/82(Julian: 285)
Time: 12:35 Mean Canopy Height: 97.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III.c.1-18

Soybean Field # 4 Date: 10/14/82(Julian: 287)
Time: 10:40 Mean Canopy Height: 98.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.78 1.10 0.63 0.84
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 6/16/82(Julian: 167)
Time: 11:40 Mean Canopy Height 10.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 6/18/82(Julian 169)
Time: 10:00 Mean Canopy Height: 11.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 6/21/82(Julian: 172)
Time: 13:50 Mean Canopy Height 16 0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 6/25/82(Julian. 176)
Time: 13:35 Mean Canopy Height: 19 0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture
Wet Biomass Density.
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 6/28/82(Julian: 179)
Time: 10:42 Mean Canopy Height: 26.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 79 04
Dry Biomass Density: 1 33
Plant Water Density: 0 28
Plant Water Density: 1 05

III.c 1-19

Soybean Field # 5 Date: 6/30/82(Julian: 181)
Time: Mean Canopy Height: 23.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 7/ 6/82(Julian: 187)
Time: 14:00 Mean Canopy Height. 29.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 80.29
Wet Biomass Density: 1.40
Dry Biomass Density: 0.28
Plant Water Density: 1 12

Soybean Field # 5 Date: 7/ 7/82(Julian. 188)
Time: 15:09 Mean Canopy Height. 35 0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.24
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 7/12/82(Julian: 193)
Time 11:30 Mean Canopy Height: 40.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 84 96
Wet Biomass Density 2.17
Dry Biomass Density: 0.33
Plant Water Density: 1.84

Soybean Field # 5 Date: 7/16/82(Julian: 197)
Time: 13:13 Mean Canopy Height: 51 5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density. 2.03
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 7/19/82(Julian: 200)
Time: 13:53 Mean Canopy Height: 53 2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 79.26 80.89 74.87 79 02
Wet Biomass Density: 2 18 2.65 1 32 2 05
Dry Biomass Density: 0.45 0 51 0.33 0 43
Plant Water Density 1.73 2 14 0.99 1.62

III.c.1-20

Soybean Field # 5 Date: 7/23/82(Julian: 204)
Time: 14:20 Mean Canopy Height: 58.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture 76.50 79.59 76.47 77.63
Wet Biomass Density: 1.93 2.69 2.63 2.42
Dry Biomass Density: 0.45 0.55 0.62 0.54
Plant Water Density: 1.48 2.14 2.01 1.88

Soybean Field # 5 Date: 7/26/82(Julian: 207)
Time: 15:00 Mean Canopy Height 62.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 2.33 2.71 2.24 2.43
Wet Biomass Density
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 7/28/82(Julian: 209)
Time: 10:30 Mean Canopy Height: 67.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture 2.79 3.44 3.25 3.16
Wet Biomass Density.
Dry Biomass Density.
Plant Water Density:

Soybean Field # 5 Date: 7/30/82(Julian: 211)
Time: 14:25 Mean Canopy Height: 65.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture.
Wet Biomass Density. 1.49 1.89 2.16 1.85
Dry Biomass Density
Plant Water Density:

Soybean Field # 5 Date: 8/ 4/82(Julian: 216)
Time: 10:24 Mean Canopy Height: 75.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture 75.32 78.87 74.77 76.57
Wet Biomass Density. 1.58 2.22 1.74 1.85
Dry Biomass Density: 0.39 0.47 0.44 0.43
Plant Water Density 1.19 1.75 1.30 1.42

Soybean Field # 5 Date: 8/ 6/82(Julian: 218)
Time: 14:00 Mean Canopy Height: 78.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 3.04 3.29 1.59 2.64
Dry Biomass Density.
Plant Water Density.

III c.1-21

Soybean Field # 5 Date: 8/ 9/82(Julian: 221)
Time: 14:18 Mean Canopy Height: 87.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 72.16 76.66 74.66 74.65
Wet Biomass Density: 2.27 2.81 1.95 2.34
Dry Biomass Density: 0.63 0.66 0.50 0.59
Plant Water Density: 1.64 2.16 1.46 1.75

Soybean Field # 5 Date: 8/11/82(Julian: 223)
Time: Mean Canopy Height: 86.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 8/13/82(Julian: 225)
Time: 14:20 Mean Canopy Height: 97.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density.
Dry Biomass Density.
Plant Water Density:

Soybean Field # 5 Date: 8/16/82(Julian: 228)
Time: 15:30 Mean Canopy Height: 96.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 75.36 76.06 76.41 76.04
Wet Biomass Density: 1.96 4.10 3.23 3.10
Dry Biomass Density: 0.48 0.98 0.76 0.74
Plant Water Density: 1.48 3.12 2.47 2.35

Soybean Field # 5 Date: 9/ 9/82(Julian: 252)
Time: 11:45 Mean Canopy Height: 101.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture. 69.73
Wet Biomass Density. 2.32 8.31 4.99 5.21
Dry Biomass Density:
Plant Water Density 1.51 3.48

Soybean Field # 5 Date: 9/16/82(Julian: 259)
Time: 14:05 Mean Canopy Height: 90.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 67.02 65.67 68.66 67.09
Wet Biomass Density. 2.44 3.83 3.57 3.28
Dry Biomass Density: 0.81 1.31 1.12 1.08
Plant Water Density: 1.64 2.51 2.45 2.20

III c.1-22

Soybean Field # 5 Date: 9/28/82(Julian: 271)
Time: 12:35 Mean Canopy Height: 94.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 42.02 49 38 52 57 48 51
Wet Biomass Density: 0.88 1.57 1.07 1.17
Dry Biomass Density: 0.51 0.79 0.51 0.60
Plant Water Density: 0.37 0.78 0.56 0.57

Soybean Field # 5 Date: 9/30/82(Julian: 273)
Time: Mean Canopy Height: 86.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 1.18 1.72 1.21 1.37
Wet Biomass Density: 1.18 1.72 1.21 1.37
Dry Biomass Density:
Plant Water Density:

Soybean Field # 5 Date: 10/ 5/82(Julian: 278)
Time: 13:40 Mean Canopy Height: 92.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 10.96 12 43 14 44 12.58
Wet Biomass Density: 1.13 1.51 1.10 1.25
Dry Biomass Density: 1.01 1.32 0.94 1.09
Plant Water Density: 0.12 0.19 0.16 0.16

Soybean Field # 5 Date: 10/12/82(Julian: 285)
Time: 14:00 Mean Canopy Height: 86.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 7.01 10 56 8 12 8.79
Wet Biomass Density: 1.17 1.59 1.06 1.28
Dry Biomass Density: 1.09 1.42 0.98 1.16
Plant Water Density: 0.08 0.17 0.09 0.11

Soybean Field # 5 Date: 10/14/82(Julian: 287)
Time: 11:40 Mean Canopy Height: 90.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 0.99 1.29 0.66 0.98
Wet Biomass Density: 0.99 1.29 0.66 0.98
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 6/ 9/82(Julian: 160)
Time: 14:43 Mean Canopy Height: 7.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

III.c.1-23

Soybean Field # 6 Date: 6/14/82(Julian: 165)
Time: 16:40 Mean Canopy Height: 7.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 6/18/82(Julian: 169)
Time: Mean Canopy Height: 12.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 6/21/82(Julian: 172)
Time: 14:05 Mean Canopy Height: 14.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 6/28/82(Julian: 179)
Time: 10:42 Mean Canopy Height: 20.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 75 24
Wet Biomass Density: 0.44
Dry Biomass Density: 0.11
Plant Water Density: 0.33

Soybean Field # 6 Date: 6/30/82(Julian: 181)
Time: Mean Canopy Height: 28.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 7/ 6/82(Julian: 187)
Time: 14:19 Mean Canopy Height: 38.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 82 62
Wet Biomass Density: 1.62
Dry Biomass Density: 0.28
Plant Water Density: 1.34

III.c.1-24

Soybean Field # 6 Date: 7/9/82(Julian: 190)
Time: 09:15 Mean Canopy Height: 38.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 2 23
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 7/12/82(Julian: 193)
Time: 13:50 Mean Canopy Height: 44.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 86.45
Wet Biomass Density: 2.89
Dry Biomass Density: 0.39
Plant Water Density: 2.50

Soybean Field # 6 Date: 7/13/82(Julian: 194)
Time: 10:51 Mean Canopy Height: 53.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 88.04
Wet Biomass Density: 2.77
Dry Biomass Density: 0.33
Plant Water Density: 2.44

Soybean Field # 6 Date: 7/15/82(Julian: 196)
Time: 13:40 Mean Canopy Height: 58.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 3.27
Wet Biomass Density
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 7/19/82(Julian: 200)
Time: 14:30 Mean Canopy Height: 55.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 80.77 86.00 85.53 84.77
Wet Biomass Density: 1.81 2.99 4.68 3.16
Dry Biomass Density: 0.35 0.42 0.68 0.48
Plant Water Density: 1.46 2.57 4.00 2.68

Soybean Field # 6 Date: 7/22/82(Julian: 203)
Time: 10:45 Mean Canopy Height: 64.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 79.94 84.99
Wet Biomass Density: 2.28 3.89 3.13 3.10
Dry Biomass Density: 0.46 0.58
Plant Water Density: 1.82 3.30

Soybean Field # 6 Date: 7/23/82(Julian: 204)
Time: 14:40 Mean Canopy Height: 65.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 78.56 80.60 80.51 79.98
Wet Biomass Density: 3.13 4.11 3.57 3.60
Dry Biomass Density: 0.67 0.80 0.70 0.72
Plant Water Density: 2.46 3.31 2.87 2.88

Soybean Field # 6 Date: 7/26/82(Julian: 207)
Time: 15:30 Mean Canopy Height: 61.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 77.19 81.33 79.28 79.39
Wet Biomass Density: 2.84 3.42 3.47 3.24
Dry Biomass Density: 0.65 0.64 0.72 0.67
Plant Water Density: 2.19 2.78 2.75 2.57

Soybean Field # 6 Date: 7/28/82(Julian: 209)
Time: 10:35 Mean Canopy Height: 63.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture
Wet Biomass Density: 1.02 2.80 6.43 3.42
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 7/29/82(Julian: 210)
Time: 12:55 Mean Canopy Height: 68.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 72.94 78.40 77.38 76.61
Wet Biomass Density: 3.11 4.61 4.10 3.94
Dry Biomass Density: 0.84 1.00 0.93 0.92
Plant Water Density: 2.27 3.61 3.17 3.02

Soybean Field # 6 Date: 7/30/82(Julian: 211)
Time: 14:40 Mean Canopy Height: 67.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 2.04 2.68 2.52 2.41
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 8/2/82(Julian: 214)
Time: Mean Canopy Height: 71.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.96 3.28 2.45 2.23
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 8/ 4/82(Julian. 216)
Time: 10:40 Mean Canopy Height: 73.5 cm
Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture 78.12
Wet Biomass Density: 2.75 4.03 2.88 3.22
Dry Biomass Density: 0.88
Plant Water Density: 3.15

Soybean Field # 6 Date: 8/ 6/82(Julian: 218)
Time: 14:10 Mean Canopy Height: 78.0 cm
Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 2.12 2.71 1.93 2.25
Dry Biomass Density:
Plant Water Density:

Soybean Field # 6 Date: 8/ 9/82(Julian: 221)
Time: 14:30 Mean Canopy Height: 79.2 cm
Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture. 72.28 76.86 77.73 76.25
Wet Biomass Density. 1.77 2.43 3.72 2.64
Dry Biomass Density: 0.49 0.56 0.83 0.63
Plant Water Density. 1.28 1.86 2.89 2.01

Soybean Field # 6 Date: 8/11/82(Julian: 223)
Time: 13:30 Mean Canopy Height: 79.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture.
Wet Biomass Density.
Dry Biomass Density
Plant Water Density:

Soybean Field # 6 Date. 8/13/82(Julian. 225)
Time: 14:20 Mean Canopy Height: 81.3 cm
Plant Parts Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density.
Plant Water Density

Soybean Field # 6 Date: 8/16/82(Julian: 228)
Time: 14.45 Mean Canopy Height: 84.7 cm
Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture 78.24 76.48 78.30 77.54
Wet Biomass Density. 2.92 5.23 4.58 4.24
Dry Biomass Density: 0.64 1.23 0.99 0.95
Plant Water Density. 2.29 4.00 3.59 3.29

III.c.1-27

Soybean Field # 6 Date: 8/19/82(Julian: 231)
Time: 11:50 Mean Canopy Height 90.5 cm
Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture. 76.50 78.43 77.62 77.66
Wet Biomass Density: 3.07 4.77 3.38 3.74
Dry Biomass Density: 0.72 1.03 0.76 0.84
Plant Water Density: 2.35 3.74 2.62 2.90

Soybean Field # 6 Date: 8/20/82(Julian: 232)
Time: 16:45 Mean Canopy Height 91.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture. 76.70 79.70 78.97 78.54
Wet Biomass Density: 3.58 4.53 3.15 3.76
Dry Biomass Density. 0.83 0.92 0.66 0.81
Plant Water Density: 2.75 3.61 2.49 2.95

Soybean Field # 6 Date: 8/31/82(Julian. 243)
Time: 13:45 Mean Canopy Height. 89.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture. 76.67 77.79 76.30 77.03
Wet Biomass Density: 4.38 6.76 4.75 5.30
Dry Biomass Density: 1.02 1.50 1.13 1.22
Plant Water Density. 3.36 5.26 3.62 4.08

Soybean Field # 6 Date. 9/ 9/82(Julian: 252)
Time: 11:20 Mean Canopy Height. 89.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 72.26 72.45 67.02 71.21
Wet Biomass Density: 4.09 5.24 2.57 3.96
Dry Biomass Density: 1.13 1.44 0.85 1.14
Plant Water Density: 2.95 3.80 1.72 2.82

Soybean Field # 6 Date: 9/16/82(Julian. 259)
Time: 13:40 Mean Canopy Height: 82.5 cm
Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 49.14 70.82 69.22 64.93
Wet Biomass Density: 2.64 4.59 3.40 3.54
Dry Biomass Density: 1.34 1.34 1.05 1.24
Plant Water Density: 1.30 3.25 2.35 2.30

Soybean Field # 6 Date: 9/28/82(Julian: 271)
Time: 12:40 Mean Canopy Height: 82.5 cm
Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture. 25.18 33.63 49.15 35.66
Wet Biomass Density. 1.28 2.29 1.34 1.63
Dry Biomass Density: 0.95 1.52 0.68 1.05
Plant Water Density: 0.32 0.77 0.66 0.58

III.c.1-28

Soybean Field # 6 Date: 9/30/82(Julian. 273)
Time: 10:25 Mean Canopy Height: 83.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 15.53 25.16 36.46 26.08
Wet Biomass Density: 0.96 1.70 1.13 1.27
Dry Biomass Density: 0.81 1.27 0.72 0.94
Plant Water Density: 0.15 0.43 0.41 0.33

Soybean Field # 6 Date: 10/ 5/82(Julian: 278)
Time: 10:45 Mean Canopy Height: 81.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 8.91 10.15 15.89 11.49
Wet Biomass Density: 1.51 2.27 1.58 1.79
Dry Biomass Density: 1.38 2.04 1.33 1.58
Plant Water Density: 0.13 0.23 0.25 0.21

Soybean Field # 7 Date: 7/19/82(Julian. 200)
Time: 15:20 Mean Canopy Height: 16.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 7/26/82(Julian. 207)
Time: 10:30 Mean Canopy Height: 24.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 7/28/82(Julian: 209)
Time: 10:25 Mean Canopy Height: 27.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 81.34 82.51 84.38 83.73
Wet Biomass Density: 0.20 0.81 2.26 1.09
Dry Biomass Density: 0.04 0.14 0.35 0.18
Plant Water Density: 0.16 0.67 1.91 0.91

Soybean Field # 7 Date: 7/30/82(Julian. 211)
Time: 14:30 Mean Canopy Height: 26.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.54 0.46 0.71 0.57
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 8/ 4/82(Julian: 216)
Time: 10:25 Mean Canopy Height: 37.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 80.60 85.77 83.40 83.97
Wet Biomass Density: 1.19 2.76 1.74 1.90
Dry Biomass Density: 0.23 0.39 0.29 0.30
Plant Water Density: 0.96 2.37 1.45 1.59

Soybean Field # 7 Date: 8/ 6/82(Julian: 218)
Time: 14:00 Mean Canopy Height: 37.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.51 1.34 1.09 1.31
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 8/ 9/82(Julian: 221)
Time: 14:20 Mean Canopy Height: 48.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 79.48 84.67 82.93 82.82
Wet Biomass Density: 1.11 1.90 1.80 1.61
Dry Biomass Density: 0.23 0.29 0.31 0.28
Plant Water Density: 0.88 1.61 1.50 1.33

Soybean Field # 7 Date: 8/11/82(Julian: 223)
Time: 13:36 Mean Canopy Height: 50.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 8/13/82(Julian. 225)
Time: 14:10 Mean Canopy Height: 46.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 8/16/82(Julian: 228)
Time: 14:00 Mean Canopy Height: 55.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 80.54 83.82 82.33 82.42
Wet Biomass Density: 1.44 2.06 2.19 1.90
Dry Biomass Density: 0.28 0.33 0.39 0.33
Plant Water Density: 1.16 1.73 1.81 1.56

Soybean Field # 7 Date: 8/31/82(Julian: 243)
Time: 15:40 Mean Canopy Height: 77.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 9/ 9/82(Julian: 252)
Time: 11:20 Mean Canopy Height: 89.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 74.03 78.26 77.32 76.94
Wet Biomass Density: 1.51 2.41 3.19 2.37
Dry Biomass Density: 0.39 0.52 0.72 0.55
Plant Water Density: 1.12 1.88 2.47 1.82

Soybean Field # 7 Date: 9/16/82(Julian: 259)
Time: 13:25 Mean Canopy Height: 93.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 72.01 73.38 73.53 73.09
Wet Biomass Density: 1.48 2.45 2.00 1.98
Dry Biomass Density: 0.41 0.65 0.53 0.53
Plant Water Density: 1.07 1.80 1.47 1.45

Soybean Field # 7 Date: 9/28/82(Julian: 271)
Time: 11:08 Mean Canopy Height: 84.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 68.18 69.43 68.31 68.70
Wet Biomass Density: 2.22 2.90 2.51 2.54
Dry Biomass Density: 0.71 0.89 0.79 0.80
Plant Water Density: 1.51 2.02 1.71 1.75

Soybean Field # 7 Date: 9/30/82(Julian: 273)
Time: 09:50 Mean Canopy Height: 87.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.43 2.40 2.37 2.07
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 10/ 5/82(Julian: 278)
Time: 11:30 Mean Canopy Height: 80.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 56.57 58.69 61.16 58.97
Wet Biomass Density: 0.54 0.77 0.70 0.67
Dry Biomass Density: 0.24 0.32 0.27 0.27
Plant Water Density: 0.31 0.45 0.43 0.39

III.c.1-31

Soybean Field # 7 Date: 10/ 7/82(Julian: 280)
Time: 11:20 Mean Canopy Height: 83.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.85 0.46 1.90 1.07
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 10/12/82(Julian: 285)
Time: 13:30 Mean Canopy Height: 82.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 28.12 34.31 42.94 35.03
Wet Biomass Density: 0.47 0.65 0.47 0.53
Dry Biomass Density: 0.34 0.43 0.27 0.34
Plant Water Density: 0.13 0.22 0.20 0.19

Soybean Field # 7 Date: 10/14/82(Julian: 287)
Time: 11:30 Mean Canopy Height: 80.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.60 1.02 0.72 0.78
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 10/19/82(Julian: 292)
Time: 13:20 Mean Canopy Height: 81.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 19.64 24.39 35.22 27.83
Wet Biomass Density: 0.46 0.82 0.89 0.72
Dry Biomass Density: 0.37 0.62 0.58 0.52
Plant Water Density: 0.09 0.20 0.31 0.20

Soybean Field # 7 Date: 10/21/82(Julian: 294)
Time: 10:40 Mean Canopy Height: 78.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.44 0.83 0.68 0.65
Dry Biomass Density:
Plant Water Density:

Soybean Field # 7 Date: 10/26/82(Julian: 299)
Time: 10:30 Mean Canopy Height: 78.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 4.93 5.64 23.43 9.62
Wet Biomass Density: 0.63 0.76 0.43 0.61
Dry Biomass Density: 0.60 0.72 0.33 0.55
Plant Water Density: 0.03 0.04 0.10 0.06

III.c.1-32

Soybean Field # 8 Date: 7/ 9/82(Julian: 190)
Time: 10:40 Mean Canopy Height: 8.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 8 Date: 7/12/82(Julian: 193)
Time: 13:39 Mean Canopy Height: 15.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 84.23
Wet Biomass Density: 0.75
Dry Biomass Density: 0.12
Plant Water Density: 0.63

Soybean Field # 8 Date: 7/13/82(Julian: 194)
Time: 11 40 Mean Canopy Height: 13.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 8 Date: 7/19/82(Julian: 200)
Time: 15:18 Mean Canopy Height: 19.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 8 Date: 7/26/82(Julian: 207)
Time: 10:30 Mean Canopy Height: 31.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 86.87 85.75
Wet Biomass Density: 1.95 1.81 2.05 1.93
Dry Biomass Density: 0.24 0.29
Plant Water Density: 1.57 1.75

Soybean Field # 8 Date: 7/28/82(Julian: 209)
Time: Mean Canopy Height: 35.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 79.23 82.69 85.94 83.26
Wet Biomass Density: 1.33 2.13 2.44 1.96
Dry Biomass Density: 0.28 0.37 0.34 0.33
Plant Water Density: 1.05 1.76 2.09 1.64

III c.1-33

Soybean Field # 8 Date: 8/ 2/82(Julian: 214)
Time: 10:00 Mean Canopy Height: 48.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 80.08 81.57
Wet Biomass Density: 1.81 2.39 1.69 1.96
Dry Biomass Density: 0.36 0.31
Plant Water Density: 1.45 1.38

Soybean Field # 8 Date: 8/ 6/82(Julian: 218)
Time: 15:05 Mean Canopy Height: 60.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.70 2.14 1.65 1.83
Dry Biomass Density:
Plant Water Density:

Soybean Field # 8 Date: 8/ 9/82(Julian: 221)
Time: 15:12 Mean Canopy Height: 68.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 78.08 82.12 78.61 79.81
Wet Biomass Density: 2.13 2.47 1.69 2.09
Dry Biomass Density: 0.47 0.44 0.36 0.42
Plant Water Density: 1.66 2.02 1.33 1.67

Soybean Field # 8 Date: 8/11/82(Julian: 223)
Time: 13:40 Mean Canopy Height: 74.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 8 Date: 8/13/82(Julian: 225)
Time: 14:10 Mean Canopy Height: 73.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 8 Date: 8/16/82(Julian: 228)
Time: 13:50 Mean Canopy Height: 87.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 81.61 74.34 79.87 77.95
Wet Biomass Density: 2.12 3.22 1.99 2.44
Dry Biomass Density: 0.39 0.83 0.40 0.54
Plant Water Density: 1.73 2.39 1.59 1.91

III c.1-34

Soybean Field # 8 Date: 8/31/82(Julian: 243)
 Time: 15:45 Mean Canopy Height: 100.5 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 8 Date: 9/ 9/82(Julian: 252)
 Time: 11:00 Mean Canopy Height: 105.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 75.33 77.34 73.54 75.79
 Wet Biomass Density: 3.57 3.90 1.98 3.15
 Dry Biomass Density: 0.88 0.88 0.52 0.76
 Plant Water Density: 2.69 3.02 1.45 2.39

Soybean Field # 8 Date: 9/16/82(Julian: 259)
 Time: Mean Canopy Height: 103.0 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 70.03 65.61 72.99 69.34
 Wet Biomass Density: 2.18 3.66 3.32 3.05
 Dry Biomass Density: 0.65 1.26 0.90 0.94
 Plant Water Density: 1.52 2.40 2.42 2.12

Soybean Field # 8 Date: 9/28/82(Julian: 271)
 Time: 11:05 Mean Canopy Height: 102.5 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 65.42 70.62 66.92 68.17
 Wet Biomass Density: 2.60 4.29 2.65 3.18
 Dry Biomass Density: 0.90 1.26 0.88 1.01
 Plant Water Density: 1.70 3.03 1.78 2.17

Soybean Field # 8 Date: 9/30/82(Julian: 273)
 Time: Mean Canopy Height: 98.8 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 0.78 1.53 1.34 1.22
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 8 Date: 10/ 5/82(Julian: 278)
 Time: 11:30 Mean Canopy Height: 98.8 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 33.36 36.96 46.49 39.55
 Wet Biomass Density: 0.84 1.38 1.27 1.16
 Dry Biomass Density: 0.56 0.87 0.68 0.70
 Plant Water Density: 0.28 0.51 0.59 0.46

III c.1-35

Soybean Field # 8 Date: 10/ 7/82(Julian: 280)
 Time: Mean Canopy Height: 98.5 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 0.97 1.41 1.00 1.13
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 8 Date: 10/12/82(Julian: 285)
 Time: 13:40 Mean Canopy Height: 97.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 14.41 22.70 23.39 20.75
 Wet Biomass Density: 0.67 1.11 0.80 0.86
 Dry Biomass Density: 0.58 0.86 0.61 0.68
 Plant Water Density: 0.10 0.25 0.19 0.18

Soybean Field # 8 Date: 10/14/82(Julian: 287)
 Time: 11:55 Mean Canopy Height: 97.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 0.47 0.70 0.59 0.58
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 8 Date: 10/19/82(Julian: 292)
 Time: 13:00 Mean Canopy Height: 96.8 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 6.79 10.13 15.35 10.96
 Wet Biomass Density: 0.53 0.76 0.65 0.65
 Dry Biomass Density: 0.50 0.68 0.55 0.58
 Plant Water Density: 0.04 0.08 0.10 0.07

Soybean Field # 8 Date: 10/21/82(Julian: 294)
 Time: 10:40 Mean Canopy Height: 97.0 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 0.69 0.58 0.55 0.61
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 9 Date: 7/19/82(Julian: 200)
 Time: 15:04 Mean Canopy Height: 15.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

III.c 1-36

Soybean Field # 9 Date: 7/26/82(Julian: 207)
Time: 11:00 Mean Canopy Height: 16.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 9 Date: 7/28/82(Julian: 209)
Time: 11:45 Mean Canopy Height: 20.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 0.14 0.89 1.21 0.75
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 9 Date: 8/ 2/82(Julian: 214)
Time: 10:00 Mean Canopy Height: 19.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 79.43 80.20
Wet Biomass Density: 1.39 1.78 2.52 1.89
Dry Biomass Density: 0.37 0.50
Plant Water Density: 1.41 2.02

Soybean Field # 9 Date: 8/ 6/82(Julian: 218)
Time: 15:00 Mean Canopy Height: 26.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 0.67 0.80 0.59 0.69
Dry Biomass Density:
Plant Water Density:

Soybean Field # 9 Date: 8/ 9/82(Julian: 221)
Time: 15:22 Mean Canopy Height: 32.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 76.47 79.83 75.14 77.46
Wet Biomass Density: 1.34 1.45 0.91 1.23
Dry Biomass Density: 0.31 0.29 0.23 0.28
Plant Water Density: 1.02 1.16 0.68 0.95

Soybean Field # 9 Date: 8/11/82(Julian: 223)
Time: 13:45 Mean Canopy Height: 33.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 9 Date: 8/13/82(Julian: 225)
Time: 14:10 Mean Canopy Height: 32.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 9 Date: 8/16/82(Julian: 228)
Time: 13:40 Mean Canopy Height: 43.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 81.89 84.38 80.27 82.21
Wet Biomass Density: 1.12 1.75 1.76 1.54
Dry Biomass Density: 0.20 0.27 0.35 0.27
Plant Water Density: 0.92 1.48 1.42 1.27

Soybean Field # 9 Date: 8/31/82(Julian: 243)
Time: 15:45 Mean Canopy Height: 82.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field # 9 Date: 9/ 9/82(Julian: 252)
Time: 11:00 Mean Canopy Height: 85.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 76.29 79.53 74.27 77.04
Wet Biomass Density: 2.53 4.54 3.42 3.50
Dry Biomass Density: 0.60 0.93 0.88 0.80
Plant Water Density: 1.93 3.61 2.54 2.69

Soybean Field # 9 Date: 9/16/82(Julian: 259)
Time: 11:00 Mean Canopy Height: 90.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 72.41 72.96 70.47 72.19
Wet Biomass Density: 1.85 2.03 1.15 1.67
Dry Biomass Density: 0.51 0.55 0.34 0.47
Plant Water Density: 1.34 1.48 0.81 1.21

Soybean Field # 9 Date: 9/28/82(Julian: 271)
Time: 11:05 Mean Canopy Height: 83.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 68.08 68.33 65.64 67.18
Wet Biomass Density: 1.99 3.90 4.04 3.31
Dry Biomass Density: 0.64 1.24 1.39 1.09
Plant Water Density: 1.36 2.67 2.65 2.23

Soybean Field # 9 Date: 9/30/82(Julian: 273)
 Time: 09:55 Mean Canopy Height: 84.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 1.25 2.42 2.51 2.06
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 9 Date: 10/ 5/82(Julian: 278)
 Time: 11 30 Mean Canopy Height: 87 0 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 51.21 53.08
 Wet Biomass Density: 1.66 1 56
 Dry Biomass Density: 0.81 1.31 0.73 0.95
 Plant Water Density: 0.85 0.83

Soybean Field # 9 Date: 10/ 7/82(Julian: 280)
 Time: Mean Canopy Height: 81.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 1.45 2.10 1.47 1.67
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 9 Date: 10/12/82(Julian: 285)
 Time: 13.38 Mean Canopy Height: 80 3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 27.77 38.36 30 09 32.95
 Wet Biomass Density: 0 76 1 33 1.14 1.08
 Dry Biomass Density: 0 55 0 82 0.80 0.72
 Plant Water Density: 0.21 0 51 0.34 0.36

Soybean Field # 9 Date: 10/14/82(Julian: 287)
 Time: 11:55 Mean Canopy Height: 77.0 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 0.44 0 68 0 42 0 52
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 9 Date: 10/19/82(Julian: 292)
 Time: 12 50 Mean Canopy Height: 84.0 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 20.10 27.84 21.88 24 12
 Wet Biomass Density: 0.47 0.75 0 40 0.54
 Dry Biomass Density: 0 38 0.54 0.31 0.41
 Plant Water Density: 0.10 0 21 0 09 0 13

Soybean Field # 9 Date: 10/21/82(Julian: 294)
 Time: 10:40 Mean Canopy Height: 84.2 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density: 0.77 0 99 0.58 0.78
 Dry Biomass Density:
 Plant Water Density:

Soybean Field # 9 Date: 10/26/82(Julian: 299)
 Time: 10:30 Mean Canopy Height: 79 2 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 12 66 25.14 14.79 18.09
 Wet Biomass Density: 0 67 0.80 0 61 0.69
 Dry Biomass Density: 0.58 0 60 0 52 0 57
 Plant Water Density: 0.08 0.20 0.09 0 12

Soybean Field #10 Date: 6/14/82(Julian: 165)
 Time: 10:13 Mean Canopy Height: 16.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Soybean Field #10 Date: 6/16/82(Julian: 167)
 Time: 15 35 Mean Canopy Height: 19 8 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Soybean Field #10 Date: 6/21/82(Julian: 172)
 Time: 10:50 Mean Canopy Height: 21 2 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Soybean Field #10 Date: 6/25/82(Julian: 176)
 Time: 10:25 Mean Canopy Height: 26 5 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Soybean Field #10 Date: 6/28/82(Julian: 179)
Time: 14:50 Mean Canopy Height: 27 7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #10 Date: 6/30/82(Julian: 181)
Time: Mean Canopy Height: 28 3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #10 Date: 7/ 7/82(Julian: 188)
Time: 10:05 Mean Canopy Height: 40 5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #10 Date: 7/ 9/82(Julian: 190)
Time: 11:38 Mean Canopy Height: 43 5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #10 Date: 7/12/82(Julian: 193)
Time: 15:15 Mean Canopy Height: 41.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 82 00
Wet Biomass Density: 2 23
Dry Biomass Density: 0 40
Plant Water Density: 1 83

Soybean Field #10 Date: 7/13/82(Julian: 194)
Time: 14:25 Mean Canopy Height: 47 5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 82.92
Wet Biomass Density: 1.47
Dry Biomass Density: 0 25
Plant Water Density: 1 22

III c.1-41

Soybean Field #10 Date: 7/15/82(Julian: 196)
Time: 09:52 Mean Canopy Height: 49 5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.85
Dry Biomass Density:
Plant Water Density:

Soybean Field #10 Date: 7/23/82(Julian: 204)
Time: 10:00 Mean Canopy Height: 56.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 77 27 81.59 78 79 79 54
Wet Biomass Density: 1.52 2.65 2.59 2 25
Dry Biomass Density: 0.35 0 49 0.55 0.46
Plant Water Density: 1.17 2 16 2.04 1.79

Soybean Field #10 Date: 7/26/82(Julian: 207)
Time: 11:12 Mean Canopy Height: 56.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 75 41 78.97 77.81 77.97
Wet Biomass Density: 1 02 3.19 3.94 2.72
Dry Biomass Density: 0.25 0.67 0.87 0.60
Plant Water Density: 0 77 2.52 3.06 2 12

Soybean Field #10 Date: 7/28/82(Julian: 209)
Time: 14:30 Mean Canopy Height: 61.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 2.39 4 13 4.09 3 54
Dry Biomass Density:
Plant Water Density:

Soybean Field #10 Date: 7/30/82(Julian: 211)
Time: 09:30 Mean Canopy Height: 72.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 3 06 2.05 3.00 2 70
Dry Biomass Density:
Plant Water Density:

Soybean Field #10 Date: 8/ 2/82(Julian: 214)
Time: 11:00 Mean Canopy Height: 72.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 75 84 80 42 77.40 77.55
Wet Biomass Density: 4.22 2.75 4.88 3.95
Dry Biomass Density: 1.02 0 54 1.10 0 89
Plant Water Density: 3 20 2 21 3 78 3 06

III c.1-42

Soybean Field #10 Date: 8/ 4/82(Julian. 216)
 Time: 15:13 Mean Canopy Height: 80.7 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 1.34 2.07 2.36 1.92
 Wet Biomass Density: 1.99 4.16 5.02 3.73
 Dry Biomass Density: 0.88 1.24 1.51 1.21
 Plant Water Density: 1.12 2.93 3.51 2.52

Soybean Field #10 Date: 8/ 9/82(Julian: 221)
 Time: 10:17 Mean Canopy Height: 77.5 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 74.66 78.44 77.60 77.35
 Wet Biomass Density: 1.57 2.82 4.41 2.93
 Dry Biomass Density: 0.40 0.61 0.99 0.66
 Plant Water Density: 1.17 2.22 3.42 2.27

Soybean Field #10 Date: 8/11/82(Julian: 223)
 Time: 14:00 Mean Canopy Height: 92.8 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Soybean Field #10 Date: 8/13/82(Julian: 225)
 Time: 14:50 Mean Canopy Height: 92.0 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture:
 Wet Biomass Density:
 Dry Biomass Density:
 Plant Water Density:

Soybean Field #10 Date: 8/18/82(Julian: 230)
 Time: Mean Canopy Height: 89.7 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 72.36 69.50 73.17 71.25
 Wet Biomass Density: 2.47 5.17 3.31 3.65
 Dry Biomass Density: 0.68 1.58 0.89 1.05
 Plant Water Density: 1.79 3.60 2.42 2.60

Soybean Field #10 Date: 9/ 2/82(Julian: 245)
 Time: 15:45 Mean Canopy Height: 87.7 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 70.38 71.58 70.54 71.01
 Wet Biomass Density: 2.16 6.75 5.12 4.68
 Dry Biomass Density: 0.64 1.92 1.51 1.36
 Plant Water Density: 1.52 4.83 3.61 3.32

III c.1-43

Soybean Field #10 Date: 9/ 9/82(Julian: 252)
 Time: 13:15 Mean Canopy Height: 85.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 56.12 70.32 69.95 67.62
 Wet Biomass Density: 1.99 4.16 5.02 3.73
 Dry Biomass Density: 0.88 1.24 1.51 1.21
 Plant Water Density: 1.12 2.93 3.51 2.52

Soybean Field #10 Date: 9/16/82(Julian: 259)
 Time: 10:45 Mean Canopy Height: 74.5 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 43.95 64.54 66.35 60.89
 Wet Biomass Density: 2.92 5.82 5.16 4.63
 Dry Biomass Density: 1.64 2.06 1.74 1.81
 Plant Water Density: 1.28 3.76 3.43 2.82

Soybean Field #10 Date: 9/23/82(Julian: 266)
 Time: 13:00 Mean Canopy Height: 71.5 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 36.74 43.61 51.18 44.06
 Wet Biomass Density: 1.67 3.59 1.95 2.40
 Dry Biomass Density: 1.06 2.03 0.95 1.34
 Plant Water Density: 0.61 1.57 1.00 1.06

III.c 1-44

Appendix III.c.2
Plant Density--Soybean Fields

Field	Row Separation (cm)			Number of Plants/m			Number of Plants per m ²	Number of Beans (per Plant)
	Mean	S.D.	N	Mean	S.D.	N		Mean
S 1	77.2	2.1	6	11.7	2.1	6	15.2	
S 2	74.5	11.5	6	12.8	3.4	12	17.2	99.3
S 3	76.8	2.4	6	16.7	4.6	12	21.7	148.5
S 4	75.0	2.4	6	25.0	2.8	6	33.3	
S 5	76.8	2.1	6	25.7	1.5	6	33.5	
S 6	73.6	2.6	12	18.3	3.0	18	24.9	128.3
S 7	75.8	3.2	6	13.3	4.4	12	17.5	64.7
S 8	74.2	2.5	6	20.3	4.5	6	27.4	82.2
S 9	78.4	1.1	5	17.9	6.9	12	22.8	
S10	73.9	2.5	12	17.8	8.0	12	24.1	109.3

Appendix III.c.3

Soybean Field Soil Moisture Data

Soybean		Field#:	1	Date:	7/19/82 (Julian: 200)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	25.24	25.87	30.14	27.82	28.71	33.18	28.50	2.92 1.02
2-5 cm	23.63	24.98	27.97	27.89	27.03	25.86	26.23	1.73 0.66
0-5 cm	24.27	25.34	28.84	27.86	27.70	28.79	27.13	2.20 0.80
Soybean		Field#:	1	Date:	7/23/82 (Julian: 204)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	28.79	26.89	23.39	19.38	26.27	99.99	24.94	3.66 1.47
2-5 cm	27.87	24.25	25.52	18.28	24.93	17.65	23.08	4.15 1.80
0-5 cm	28.24	25.31	24.67	18.72	25.47	99.99	23.83	3.96 1.67
Soybean		Field#:	1	Date:	7/26/82 (Julian: 207)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	18.44	24.27	22.79	9.61	8.67	11.49	15.88	6.86 4.32
2-5 cm	18.51	23.07	24.92	22.09	17.06	18.70	20.72	3.08 1.49
0-5 cm	18.48	23.55	24.07	17.10	13.70	15.81	18.79	4.59 2.62
Soybean		Field#:	1	Date:	7/28/82 (Julian: 209)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	27.37	27.09	32.86	26.22	25.00	20.24	26.46	4.07 1.54
2-5 cm	29.84	23.36	31.16	27.80	28.53	21.77	27.08	3.71 1.37
0-5 cm	28.85	24.85	31.84	27.17	27.12	21.16	26.83	3.86 1.44
Soybean		Field#:	1	Date:	7/30/82 (Julian: 211)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	28.11	17.95	17.80	16.15	17.56	14.36	18.66	4.83 2.59
2-5 cm	26.38	15.75	99.99	13.10	18.03	15.10	17.67	5.17 2.93
0-5 cm	27.07	16.63	99.99	14.32	17.84	14.81	18.07	5.04 2.79
Soybean		Field#:	1	Date:	8/ 2/82 (Julian: 214)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	17.83	19.92	16.85	20.70	12.92	10.31	16.42	4.06 2.47
2-5 cm	18.52	11.28	20.15	25.73	16.85	12.35	17.48	5.32 3.04
0-5 cm	18.24	14.73	18.83	23.71	15.28	11.54	17.05	4.81 2.81
Soybean		Field#:	1	Date:	8/ 6/82 (Julian: 218)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	31.13	29.43	29.44	31.39	28.59	30.52	30.09	1.10 0.37
2-5 cm	26.87	28.76	25.73	27.90	27.09	26.69	27.17	1.04 0.38
0-5 cm	28.58	29.03	27.22	29.30	27.69	28.22	28.34	1.07 0.38
Soybean		Field#:	1	Date:	8/ 9/82 (Julian: 221)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	27.31	28.20	27.58	23.66	24.94	26.48	26.36	1.74 0.66
2-5 cm	25.87	29.42	28.29	23.61	24.17	23.61	25.83	2.51 0.97
0-5 cm	26.45	28.93	28.01	23.63	24.48	24.76	26.04	2.20 0.85

III.c.3-1

Soybean		Field#:	1	Date:	8/16/82 (Julian: 228)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	30.84	32.14	30.00	31.45	30.39	99.99	30.96	0.85 0.27
2-5 cm	31.11	28.02	27.93	28.12	27.17	27.54	28.31	1.41 0.50
0-5 cm	31.00	29.67	28.76	29.45	28.46	99.99	29.37	1.19 0.41
Soybean		Field#:	1	Date:	8/18/82 (Julian: 230)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	26.24	27.91	24.45	26.18	29.23	28.53	27.09	1.78 0.66
2-5 cm	26.89	27.66	24.48	24.24	19.32	25.35	24.66	2.94 1.19
0-5 cm	26.63	27.76	24.47	25.02	23.28	26.62	25.63	2.48 0.98
Soybean		Field#:	1	Date:	9/ 9/82 (Julian: 252)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	23.41	22.19	22.61	28.10	27.55	25.98	24.97	2.58 1.03
2-5 cm	24.54	22.19	23.10	25.21	27.61	26.74	24.90	2.07 0.83
0-5 cm	24.09	22.19	22.90	26.37	27.58	26.43	24.93	2.27 0.91
Soybean		Field#:	1	Date:	9/16/82 (Julian: 259)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	17.11	20.84	21.53	20.13	26.29	23.19	21.51	3.08 1.43
2-5 cm	17.91	21.12	12.53	20.72	25.02	23.25	20.09	4.42 2.20
0-5 cm	17.59	21.01	16.13	20.48	25.53	23.23	20.66	3.88 1.89
Soybean		Field#:	1	Date:	9/23/82 (Julian: 266)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	11.79	18.89	14.37	19.71	13.56	21.80	16.69	3.98 2.39
2-5 cm	13.57	20.09	15.13	20.42	16.17	21.74	17.85	3.33 1.86
0-5 cm	12.86	19.61	14.82	20.14	15.13	21.76	17.39	3.59 2.07
Soybean		Field#:	1	Date:	9/28/82 (Julian: 271)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	10.53	10.18	8.39	10.22	12.15	12.09	10.60	1.40 1.32
2-5 cm	12.87	12.38	11.40	14.15	15.13	13.70	13.27	1.33 1.00
0-5 cm	11.94	11.50	10.20	12.58	13.94	13.06	12.20	1.36 1.13
Soybean		Field#:	1	Date:	9/30/82 (Julian: 273)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	12.61	16.48	20.07	12.10	6.14	14.43	13.64	4.68 3.44
2-5 cm	14.25	17.53	22.19	14.95	9.64	15.93	15.75	4.12 2.62
0-5 cm	13.60	17.11	21.34	13.81	8.24	15.33	14.90	4.35 2.94
Soybean		Field#:	1	Date:	10/ 5/82 (Julian: 278)	Time:	S.D. S D./Mean	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	
0-2 cm	13.52	8.42	4.74	7.94	8.63	13.39	9.44	3.42 3.62
2-5 cm	12.84	12.02	8.54	13.37	14.77	14.19	12.62	2.22 1.76
0-5 cm	13.12	10.58	7.02	11.20	12.31	13.87	11.35	2.70 2.50

III.c.3-2

Soybean Field#: 1 Date: 10/7/82 (Julian: 280) Time: 10:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14 11	6.04	4.75	8.27	5.04	9.29	7.92	3.53	4.45
2-5 cm	15 98	9.73	7.50	12.00	9.86	9.97	10.84	2.89	2.67
0-5 cm	15 23	8.25	6.40	10.51	7.94	9.70	9.67	3.15	3.38
Soybean Field#: 1 Date: 10/12/82 (Julian: 285) Time: 10:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	99 99	20.57	16.88	99.99	20.45	24.09	20.50	2.94	1.44
2-5 cm	24.24	21.98	20.44	26.07	21.04	24.06	22.97	2.17	0.94
0-5 cm	99 99	21.42	19.02	99.99	20.81	24.07	21.98	2.48	1.14
Soybean Field#: 1 Date: 10/14/82 (Julian: 287) Time: 10:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.42	23.12	17.37	18.84	22.60	20.01	20.56	2.23	1.09
2-5 cm	21 88	22.54	19.92	19 99	25 08	21.42	21 81	1 91	0 88
0-5 cm	21 70	22.77	18.90	19.53	24.09	20 85	21 31	2 04	0 96
Soybean Field#: 1 Date: 10/19/82 (Julian: 292) Time: 10:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	10 60	13.83	14.69	14.19	17.16	11.28	13.63	2.39	1.76
2-5 cm	16 73	17 17	19 70	19 64	20.47	19.10	18.80	1.51	0.80
0-5 cm	14 28	15 84	17 70	17.46	19.15	15 97	16.73	1.86	1 18
Soybean Field#: 2 Date: 7/12/82 (Julian: 193) Time: 09:28									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	25 58	25 51	24.60	23 85	25.78	29.02	25.72	1.77	0.69
2-5 cm	29 50	23 15	23 31	23.67	24 12	25.92	24 94	2 45	0 98
0-5 cm	27 93	24 09	23 82	23.74	24.79	27.16	25.26	2.18	0.86
Soybean Field#: 2 Date: 7/13/82 (Julian: 194) Time: 14:27									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22 23	21 83	16.06	25 91	31.41	26.51	23 99	5 21	2 17
2-5 cm	18 47	26 62	25 09	22 49	26.35	23.83	23.81	3 04	1 28
0-5 cm	19.97	24 71	21.48	23 86	28.37	24.90	23 88	3.91	1 64
Soybean Field#: 2 Date: 7/19/82 (Julian: 200) Time: 10:50									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	99 99	31.10	20.36	21 08	24 69	22.86	24.02	4.30	1.79
2-5 cm	24 36	24 36	20.74	20.88	25 21	22 69	23.04	1 91	0.83
0-5 cm	99 99	27.06	20.59	20.96	25 00	22 76	23 43	2 87	1 21
Soybean Field#: 2 Date: 7/23/82 (Julian: 204) Time: 13:38									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	27 54	28 65	22 99	26.15	29 04	24.80	26.53	2.34	0.88
2-5 cm	25 85	26 19	22.48	25.69	27.27	26 73	25.70	1 68	0 65
0-5 cm	26 52	27.17	22.68	25 88	27 98	25 96	26 03	1 95	0 75

III. c 3-3

Soybean Field#: 2 Date: 7/26/82 (Julian: 207) Time: 14:05									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	20 07	20.46	12.58	18.81	23 98	21 57	19.58	3.85	1 96
2-5 cm	19.22	22.07	16.14	19.53	21.40	21.23	19.93	2.17	1.09
0-5 cm	19.56	21.43	14.72	19.24	22 44	21.36	19.79	2.84	1.44
Soybean Field#: 2 Date: 7/28/82 (Julian: 209) Time: 15:45									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19.68	20.38	21.41	17 25	23 09	20.75	20.43	1.94	0.95
2-5 cm	19 72	19 82	20.63	18.02	23.39	28 39	21 66	3 74	1 72
0-5 cm	19.70	20.04	20.94	17.71	23.27	25.34	21.17	3 02	1.41
Soybean Field#: 2 Date: 7/30/82 (Julian: 211) Time: 13:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	16.62	19.00	23.22	6 32	20.45	18.87	17.41	5 86	3.36
2-5 cm	16.04	18.39	21.32	11 47	19.97	19.19	17.73	3.53	1.99
0-5 cm	16.27	18 63	22.08	9.41	20.16	19.06	17.60	4.46	2.54
Soybean Field#: 2 Date: 8/2/82 (Julian: 214) Time: 14:37									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2 72	8.31	8.43	3.77	8.93	16 22	8.06	4.79	5.93
2-5 cm	10.42	14 53	14 09	11.89	12.57	12 50	12 67	1 50	1.18
0-5 cm	7.34	12 04	11.83	8.64	11.12	13 99	10.83	2 81	3 08
Soybean Field#: 2 Date: 8/6/82 (Julian: 218) Time: 11:57									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	28.41	19.24	26.00	25.20	23 57	23.76	24 36	3.07	1 26
2-5 cm	26 03	23.38	23.90	23 44	22.24	21 77	23 46	1 49	0 64
0-5 cm	26.98	21.72	24.74	24 15	22.77	22.57	23.82	2.12	0.89
Soybean Field#: 2 Date: 8/9/82 (Julian: 221) Time: 13:25									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19 48	23.39	18 87	17 48	18 53	25.99	20 62	3.32	1.61
2-5 cm	19.36	22.63	18.74	22.33	20.97	24 26	21.38	2.10	0 98
0-5 cm	19.41	22.93	18 79	20.39	19.99	24.95	21 08	2.58	1.23
Soybean Field#: 2 Date: 8/16/82 (Julian: 228) Time: 10:54									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	25.30	25 25	23 45	23 33	24 54	26.96	24 80	1.35	0.55
2-5 cm	23.55	23.37	21 90	23 42	23.63	24.66	23.42	0 88	0 38
0-5 cm	24 25	24.12	22 52	23 38	23.99	25.58	23.97	1 07	0 45
Soybean Field#: 2 Date: 8/18/82 (Julian: 230) Time: 14:20									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.11	21.28	24.84	21.02	25.02	25 34	23.27	2 01	0 86
2-5 cm	23.70	20.79	23.29	19.92	99.99	24 17	22.37	1 89	0 85
0-5 cm	23 07	20.98	23 91	20.36	99.99	24.64	22 73	1.94	0 85

III c.3-4

Soybean	Field#:	2	Date:	9/ 2/82 (Julian: 245)	Time:				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	11.85	14.61	21.22	17.20	18.38	14.71	16.33	3.30	2.02
2-5 cm	16.41	15.78	17.38	18.05	99.99	17.11	16.95	0.88	0.52
0-5 cm	14.58	15.31	18.91	17.71	99.99	16.15	16.70	1.85	1.12
Soybean	Field#:	2	Date: <td>9/ 9/82 (Julian: 252)</td> <td>Time:</td> <td>10:10</td> <td></td> <td></td> <td></td>	9/ 9/82 (Julian: 252)	Time:	10:10			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	20.26	21.27	19.34	20.95	22.79	16.44	20.17	2.16	1.07
2-5 cm	19.63	18.93	19.25	19.44	18.92	18.76	19.15	0.34	0.18
0-5 cm	19.88	19.86	19.29	20.04	20.47	17.83	19.56	1.07	0.53
Soybean	Field#:	2	Date: <td>9/16/82 (Julian: 259)</td> <td>Time:</td> <td>12:40</td> <td></td> <td></td> <td></td>	9/16/82 (Julian: 259)	Time:	12:40			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	18.96	17.09	14.79	17.71	19.09	22.76	18.40	2.65	1.44
2-5 cm	18.57	16.55	15.31	17.53	18.90	23.23	18.35	2.73	1.49
0-5 cm	18.73	16.76	15.10	17.60	18.98	23.04	18.37	2.70	1.47
Soybean	Field#:	2	Date: <td>9/23/82 (Julian: 266)</td> <td>Time:</td> <td>14:35</td> <td></td> <td></td> <td></td>	9/23/82 (Julian: 266)	Time:	14:35			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14.83	14.83	12.06	17.05	13.91	13.47	14.36	1.67	1.16
2-5 cm	13.60	16.85	12.54	16.35	12.52	13.52	14.23	1.90	1.34
0-5 cm	14.09	16.04	12.35	16.63	13.08	13.50	14.28	1.81	1.27
Soybean	Field#:	2	Date: <td>9/28/82 (Julian: 271)</td> <td>Time:</td> <td>10:00</td> <td></td> <td></td> <td></td>	9/28/82 (Julian: 271)	Time:	10:00			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	10.67	14.12	12.15	7.82	7.88	10.20	10.47	2.45	2.34
2-5 cm	12.12	14.92	13.74	10.56	10.04	11.06	12.07	1.92	1.59
0-5 cm	11.54	14.60	13.10	9.47	9.18	10.72	11.43	2.13	1.89
Soybean	Field#:	2	Date: <td>9/30/82 (Julian: 273)</td> <td>Time:</td> <td></td> <td></td> <td></td> <td></td>	9/30/82 (Julian: 273)	Time:				
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	10.52	7.58	8.68	15.74	13.41	7.91	10.64	3.30	3.10
2-5 cm	12.77	7.72	5.19	16.06	17.68	9.19	11.43	4.90	4.29
0-5 cm	11.87	7.66	6.58	15.93	15.98	8.68	11.12	4.26	3.81
Soybean	Field#:	2	Date: <td>10/ 5/82 (Julian: 278)</td> <td>Time:</td> <td>14:05</td> <td></td> <td></td> <td></td>	10/ 5/82 (Julian: 278)	Time:	14:05			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.18	10.11	10.81	14.19	13.34	17.35	12.33	3.29	2.67
2-5 cm	10.12	10.96	11.10	14.72	14.53	15.58	12.83	2.36	1.84
0-5 cm	9.34	10.62	10.98	14.51	14.05	16.29	12.63	2.73	2.17
Soybean	Field#:	2	Date: <td>10/ 7/82 (Julian: 280)</td> <td>Time:</td> <td>10:26</td> <td></td> <td></td> <td></td>	10/ 7/82 (Julian: 280)	Time:	10:26			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	9.50	11.08	7.82	12.77	17.23	12.89	11.88	3.26	2.75
2-5 cm	11.76	11.79	9.23	14.15	16.26	14.82	13.00	2.55	1.96
0-5 cm	10.85	11.50	8.67	13.60	16.64	14.05	12.55	2.83	2.27

Soybean	Field#:	2	Date:	10/12/82	(Julian: 285)	Time:	12:35		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.67	21.55	22.52	20.68	18.30	22.11	21.30	1.64	0.77
2-5 cm	22.34	19.99	19.94	20.52	19.52	21.37	20.61	1.06	0.51
0-5 cm	22.47	20.61	20.97	20.58	19.03	21.67	20.89	1.29	0.62
Soybean	Field#:	2	Date:	10/19/82	(Julian: 292)	Time:	11:25		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14.02	13.61	10.74	17.86	15.78	19.10	15.19	3.05	2.01
2-5 cm	16.15	16.04	14.86	17.33	18.18	18.62	16.86	1.43	0.85
0-5 cm	15.30	15.07	13.21	17.54	17.22	18.81	16.19	2.08	1.31
Soybean	Field#:	2	Date:	10/21/82	(Julian: 294)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13.09	15.43	9.81	12.48	12.66	17.31	13.46	2.60	1.93
2-5 cm	16.69	17.60	15.43	17.78	15.83	18.31	16.94	1.15	0.68
0-5 cm	15.25	16.73	13.18	15.66	14.56	17.91	15.55	1.73	1.18
Soybean	Field#:	2	Date:	10/26/82	(Julian: 299)	Time:	11:00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.07	14.58	8.77	15.90	15.99	14.19	12.92	3.56	2.76
2-5 cm	14.52	15.87	13.15	15.96	17.08	15.44	15.34	1.35	0.88
0-5 cm	11.94	15.35	11.40	15.94	16.64	14.94	14.37	2.24	1.63
Soybean	Field#:	3	Date:	6/14/82	(Julian: 165)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	26.13	23.51	20.64	25.73	28.60	29.67	25.72	3.31	1.29
2-5 cm	24.47	22.23	20.80	20.82	24.84	29.80	23.83	3.40	1.43
0-5 cm	25.13	22.74	20.74	22.79	26.34	29.75	24.58	3.36	1.37
Soybean	Field#:	3	Date:	6/16/82	(Julian: 167)	Time:	10:45		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.82	18.96	19.68	26.01	29.96	27.24	23.95	4.45	1.86
2-5 cm	24.31	21.13	21.58	30.94	25.63	27.39	25.16	3.70	1.47
0-5 cm	23.32	20.26	20.82	28.97	27.36	27.33	24.68	4.00	1.62
Soybean	Field#:	3	Date:	6/18/82	(Julian: 169)	Time:	13:24		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17.53	20.95	17.21	14.41	15.27	15.65	16.84	2.34	1.39
2-5 cm	19.15	18.11	19.54	22.48	21.11	22.72	20.52	1.88	0.92
0-5 cm	18.51	19.25	18.61	19.25	18.77	19.89	19.05	2.06	1.10
Soybean	Field#:	3	Date:	6/21/82	(Julian: 172)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6.13	18.71	6.47	13.68	15.85	14.95	12.63	5.18	4.10
2-5 cm	14.78	20.30	16.04	22.04	26.52	23.40	20.51	4.46	2.18
0-5 cm	11.32	19.66	12.21	18.69	22.25	20.02	17.36	4.75	2.95

Soybean	Field#:	3	Date:	6/23/82	(Julian: 174)	Time: 15:00			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
0-2 cm	23 36	99.99	24.66	32.03	20.37	24.79	25.04	4.29	1.71
2-5 cm	23.39	23.22	22.40	30.70	26.99	24.23	25.16	3.15	1.25
0-5 cm	23.38	99.99	23.31	31.23	24.34	24.45	25.11	3.60	1.44
Soybean	Field#:	3	Date:	6/25/82	(Julian: 176)	Time: 13:10			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	10 79	6.69	7.14	18.90	15.95	24.34	13.97	7.01	5.02
2-5 cm	17 61	15.18	15.31	20.52	19.66	25.49	18.96	3.87	2.04
0-5 cm	14.88	11.78	12.04	19.87	18.17	25.03	16.96	5.12	3.23
Soybean	Field#:	3	Date:	6/28/82	(Julian: 179)	Time: 14:10			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
0-2 cm	20 75	16.93	16.60	22.62	20.18	27.07	20.69	3.89	1.88
2-5 cm	21 52	20.18	19.13	23.50	22.24	30.54	22.85	4.07	1.78
0-5 cm	21 21	18.88	18.12	23.15	21.41	29.15	21.99	3.99	1.82
Soybean	Field#:	3	Date:	7/ 6/82	(Julian: 187)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	4 83	6.20	4.75	5.05	7.18	6.41	5.74	1.00	1.75
2-5 cm	16.04	12.06	8.26	7.03	9.94	10.80	10.69	3.17	2.97
0-5 cm	11.55	9.72	6.86	6.23	8.84	9.05	8.71	2.31	2.48
Soybean	Field#:	3	Date:	7/ 7/82	(Julian: 188)	Time: 14:42			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
0-2 cm	2.10	1.13	1.34	1.62	1.46	3.77	1.91	0.97	5.10
2-5 cm	10.60	7.32	5.37	10.52	6.33	11.37	8.59	2.55	2.97
0-5 cm	7.20	4.84	3.76	6.96	4.38	8.33	5.91	1.92	3.82
Soybean	Field#:	3	Date:	7/12/82	(Julian: 193)	Time: 09:45			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
0-2 cm	11.95	11.54	10.40	14.80	14.81	14.61	13.02	1.96	1.50
2-5 cm	14.44	13.42	13.32	15.81	16.87	17.51	15.23	1.78	1.17
0-5 cm	13.44	12.67	12.15	15.41	16.05	16.35	14.34	1.85	1.30
Soybean	Field#:	3	Date:	7/13/82	(Julian: 194)	Time: 14:10			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.92	19.53	23.41	24.84	23.62	28.93	23.88	3.05	1.28
2-5 cm	21.50	19.92	22.66	24.14	23.35	26.44	23.00	2.24	0.98
0-5 cm	22.07	19.76	22.96	24.42	23.46	27.44	23.35	2.57	1.10
Soybean	Field#:	3	Date:	7/15/82	(Julian: 196)	Time: 14:45			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean
0-2 cm	15.59	12.12	14.30	10.99	13.52	99.99	13.30	1.80	1.36
2-5 cm	14.95	14.24	14.66	13.56	15.39	17.91	15.12	1.50	0.99
0-5 cm	15.20	13.39	14.52	12.53	14.64	99.99	14.39	1.62	1.14

III c.3-7

Soybean	Field#:	3	Date:	7/19/82	(Julian: 200)	Time: 11:30			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	4.29	2.64	3.23	4.03	4.99	3.73	3.82	0.82	2.15
2-2.5 cm	10.38	6.26	5.73	7.54	14.39	9.24	8.93	3.20	3.59
0-5 cm	7.95	4.81	4.73	6.14	10.63	7.04	6.88	2.25	3.01
Soybean	Field#:	3	Date:	7/23/82	(Julian: 204)	Time: 13:38			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	9.09	8.85	4.61	4.86	11.07	4.62	7.18	2.83	3.94
2-2.5 cm	12.17	14.02	11.91	11.57	12.78	15.09	12.92	1.37	1.06
0-5 cm	10.94	11.95	8.99	8.89	12.10	10.90	10.63	1.95	2.21
Soybean	Field#:	3	Date:	7/26/82	(Julian: 207)	Time: 14:00			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.70	3.23	3.40	4.90	4.17	2.69	3.52	0.87	2.47
2-2.5 cm	6.31	8.03	6.22	7.76	8.19	7.35	7.31	0.86	1.18
0-5 cm	4.86	6.11	5.09	6.62	6.58	5.49	5.79	0.86	1.70
Soybean	Field#:	3	Date:	7/28/82	(Julian: 209)	Time: 15:43			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	3.55	3.71	4.43	3.69	2.99	2.86	3.54	0.57	1.61
2-2.5 cm	7.83	8.20	7.44	10.79	13.73	10.39	9.73	2.40	2.46
0-5 cm	6.12	6.40	6.24	7.95	9.43	7.38	7.25	1.67	2.12
Soybean	Field#:	3	Date:	8/2/82	(Julian: 214)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	1.47	1.56	2.80	3.81	1.56	2.60	2.30	0.94	4.08
2-2.5 cm	2.76	2.67	4.27	2.21	6.87	8.40	4.53	2.55	5.62
0-5 cm	2.24	2.23	3.68	2.85	4.75	6.08	3.64	1.90	5.01
Soybean	Field#:	3	Date:	8/6/82	(Julian: 218)	Time: 11:47			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	99.99	22.14	22.24	99.99	15.46	25.04	21.22	4.06	1.92
2-2.5 cm	20.88	20.37	21.43	16.17	99.99	25.76	20.92	3.41	1.63
0-5 cm	99.99	21.08	21.75	99.99	99.99	25.47	21.04	3.67	1.74
Soybean	Field#:	3	Date:	8/9/82	(Julian: 221)	Time: 13:20			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17.23	16.98	17.57	16.62	17.63	20.99	17.84	1.59	0.89
2-2.5 cm	17.67	17.28	17.00	17.22	16.84	20.16	17.69	1.24	0.70
0-5 cm	17.49	17.16	17.23	16.98	17.15	20.49	17.75	1.38	0.78
Soybean	Field#:	3	Date:	8/16/82	(Julian: 228)	Time: 11:00			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.72	23.07	24.48	22.27	23.34	25.77	23.61	1.29	0.55
2-2.5 cm	20.97	19.90	21.68	21.80	22.40	25.29	22.01	1.82	0.83
0-5 cm	21.67	21.16	22.80	21.99	22.78	25.48	22.65	1.61	0.72

III c.3-8

Soybean		Field#:	3	Date:	8/18/82	(Julian: 230)	Time: 14:21		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.21	99.99	18.13	23.09	19.49	25.21	21.42	2.82	1.31
2-5 cm	20.24	99.99	16.89	21.00	99.99	24.52	20.67	3.13	1.52
0-5 cm	20.63	99.99	17.39	21.84	99.99	24.80	20.97	3.01	1.43
Soybean		Field#:	3	Date:	9/ 2/82	(Julian: 245)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.04	11.96	8.79	15.00	14.87	19.71	13.06	4.38	3.35
2-5 cm	16.12	13.60	11.69	16.68	17.36	21.14	16.10	3.26	2.02
0-5 cm	12.89	12.94	10.53	16.01	16.36	20.57	14.88	3.71	2.56
Soybean		Field#:	3	Date:	9/ 9/82	(Julian: 252)	Time: 09:45		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19.93	17.00	18.88	10.69	19.45	20.23	17.70	3.62	2.05
2-5 cm	19.12	17.17	19.05	24.73	17.80	20.75	19.77	2.73	1.38
0-5 cm	19.45	17.10	18.98	19.11	18.46	20.55	18.94	3.08	1.65
Soybean		Field#:	3	Date:	9/16/82	(Julian: 259)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	16.07	16.92	15.92	17.96	18.96	18.48	17.38	1.27	0.73
2-5 cm	17.74	17.19	16.54	15.46	18.85	19.89	17.61	1.59	0.90
0-5 cm	17.07	17.08	16.29	16.46	18.89	19.33	17.52	1.47	0.84
Soybean		Field#:	3	Date:	9/23/82	(Julian: 266)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	12.85	12.26	11.36	10.26	9.68	17.30	12.28	2.73	2.22
2-5 cm	14.47	15.93	12.37	14.28	14.89	18.54	15.08	2.05	1.36
0-5 cm	13.82	14.46	11.96	12.67	12.81	18.04	13.96	2.32	1.71
Soybean		Field#:	3	Date:	9/28/82	(Julian: 271)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	7.58	5.12	4.80	4.70	13.30	11.30	7.80	3.70	4.74
2-5 cm	15.66	12.55	12.56	8.41	16.17	15.87	13.54	3.00	2.22
0-5 cm	12.42	9.58	9.45	6.93	15.02	14.04	11.24	3.28	3.23
Soybean		Field#:	3	Date:	9/30/82	(Julian: 273)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5.73	5.21	4.70	9.17	7.04	6.76	6.43	1.61	2.50
2-5 cm	9.58	7.44	6.72	10.56	11.21	10.75	9.38	1.87	2.00
0-5 cm	8.04	6.54	5.91	10.01	9.54	9.16	8.20	1.77	2.20
Soybean		Field#:	3	Date:	10/ 5/82	(Julian: 278)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.93	3.35	3.47	2.85	4.27	3.99	3.48	0.56	1.62
2-5 cm	7.59	8.38	8.74	7.48	9.80	14.32	9.39	2.56	2.73
0-5 cm	5.73	6.37	6.63	5.63	7.59	10.19	7.02	1.76	2.29

III.c.3-9

Soybean		Field#:	3	Date:	10/12/82	(Julian: 285)	Time: 12:33		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19.74	19.94	19.53	22.26	20.08	22.10	20.61	1.23	0.60
2-5 cm	20.02	19.82	18.81	20.97	20.57	23.55	20.62	1.61	0.78
0-5 cm	19.91	19.87	19.10	21.49	20.37	22.97	20.62	1.46	0.71
Soybean		Field#:	4	Date:	6/ 9/82	(Julian: 160)	Time: 15:52		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	23.18	17.60	19.99	21.80	23.70	29.17	22.57	3.93	1.74
2-5 cm	22.89	19.06	25.76	26.45	23.24	30.98	24.73	4.02	1.63
0-5 cm	23.01	18.47	23.45	24.59	23.42	30.25	23.87	3.98	1.67
Soybean		Field#:	4	Date:	6/21/82	(Julian: 172)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	15.08	11.44	15.81	16.28	13.77	14.33	14.45	1.74	1.20
2-5 cm	16.63	16.30	20.28	21.12	18.00	21.10	18.90	2.21	1.17
0-5 cm	16.01	14.36	18.49	19.18	16.31	18.39	17.12	2.02	1.18
Soybean		Field#:	4	Date:	6/25/82	(Julian: 176)	Time: 13:25		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	11.43	6.73	11.23	22.65	11.31	15.92	13.21	5.46	4.13
2-5 cm	15.70	14.65	18.61	25.78	21.77	21.65	19.69	4.19	2.13
0-5 cm	13.99	11.48	15.66	24.53	17.59	19.36	17.10	4.70	2.93
Soybean		Field#:	4	Date:	6/28/82	(Julian: 179)	Time: 14:00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.55	14.97	27.17	27.56	19.28	21.40	21.99	4.79	2.18
2-5 cm	20.46	17.59	25.63	28.56	19.08	20.94	22.05	4.19	1.90
0-5 cm	20.90	16.54	26.25	28.16	19.16	21.12	22.02	4.43	2.01
Soybean		Field#:	4	Date:	7/ 6/82	(Julian: 187)	Time: 11:10		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	9.70	2.20	4.53	3.66	2.88	6.57	4.92	2.79	5.66
2-5 cm	18.18	9.57	14.77	11.55	14.13	20.39	14.76	4.03	2.73
0-5 cm	14.79	6.62	10.68	8.39	9.63	14.86	10.83	3.53	3.90
Soybean		Field#:	4	Date:	7/ 7/82	(Julian: 188)	Time: 14:10		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	3.62	2.31	99.99	1.97	1.53	1.69	2.22	0.84	3.75
2-5 cm	19.16	13.74	12.91	11.12	8.95	8.55	12.40	3.90	3.15
0-5 cm	12.94	9.16	99.99	7.46	5.98	5.81	8.33	2.68	3.39
Soybean		Field#:	4	Date:	7/12/82	(Julian: 193)	Time: 09:30		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.09	9.28	8.92	9.15	9.69	11.84	9.49	1.27	1.33
2-5 cm	14.54	12.87	19.92	16.93	16.10	15.84	16.03	2.38	1.48
0-5 cm	11.96	11.43	15.52	13.82	13.54	14.24	13.42	1.93	1.42

III.c.3-10

Soybean Field#: 4 Date: 7/13/82 (Julian: 194) Time: 14:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	29.30	21.79	29.87	28.57	26.22	30.49	27.71	3.25	1.17
2-5 cm	23.12	19.14	23.33	25.12	23.74	28.50	23.83	3.04	1.28
0-5 cm	25.59	20.20	25.95	26.50	24.73	29.29	25.38	3.12	1.23
Soybean Field#: 4 Date: 7/15/82 (Julian: 196) Time: 14:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	11.43	9.14	17.32	18.53	99.99	14.79	14.24	3.94	2.77
2-5 cm	15.16	12.94	18.79	21.30	99.99	17.74	17.18	3.24	1.88
0-5 cm	13.67	11.42	18.20	20.19	99.99	16.56	16.01	3.52	2.24
Soybean Field#: 4 Date: 7/19/82 (Julian: 200) Time: 11:15									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.98	2.91	3.44	2.73	3.73	99.99	3.16	0.41	1.31
2-5 cm	9.19	7.58	9.81	7.93	8.48	99.99	8.60	0.91	1.06
0-5 cm	6.71	5.72	7.27	5.85	6.58	99.99	6.42	0.71	1.16
Soybean Field#: 4 Date: 7/23/82 (Julian: 204) Time: 13:54									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	12.42	8.82	11.32	7.45	7.09	19.39	11.08	4.59	4.14
2-5 cm	15.91	14.51	18.06	9.50	15.10	21.16	15.71	3.89	2.47
0-5 cm	14.51	12.23	15.36	8.68	11.90	20.45	13.86	4.17	3.14
Soybean Field#: 4 Date: 7/26/82 (Julian: 207) Time: 13:54									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.74	1.90	5.38	4.04	1.46	3.57	3.18	1.45	4.56
2-5 cm	8.92	7.00	9.01	7.03	3.50	10.38	7.64	2.41	3.15
0-5 cm	6.45	4.96	7.56	5.83	2.68	7.66	5.86	2.02	3.71
Soybean Field#: 4 Date: 7/28/82 (Julian: 209) Time: 15:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	4.08	3.58	4.76	5.50	4.78	4.57	4.54	0.66	1.45
2-5 cm	8.31	6.38	11.01	6.22	8.05	6.19	7.69	1.88	2.44
0-5 cm	6.61	5.26	8.51	5.93	6.74	5.54	6.43	1.39	2.04
Soybean Field#: 4 Date: 7/30/82 (Julian: 211) Time: 13:15									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	3.48	2.76	5.14	5.14	3.27	3.15	3.82	1.05	2.73
2-5 cm	10.39	4.60	9.67	9.82	6.30	4.00	7.46	2.85	3.82
0-5 cm	7.63	3.87	7.86	7.95	5.09	3.66	6.01	2.13	3.38
Soybean Field#: 4 Date: 8/ 2/82 (Julian: 214) Time: 14:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	0.60	1.28	3.66	4.58	3.47	2.99	2.76	1.52	5.49
2-5 cm	3.57	1.87	4.32	10.45	3.65	8.31	5.36	3.29	6.13
0-5 cm	2.38	1.64	4.06	8.10	3.58	6.18	4.32	2.58	8.57

Soybean Field#: 4 Date: 9/28/82 (Julian: 271) Time: 09 50									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	7.80	6.03	3.42	4.79	6.70	7.81	6.09	1.74	2.85
2-5 cm	17.61	15.06	5.95	6.90	10.50	13.68	11.62	4.64	4.00
0-5 cm	13.69	11.45	4.94	6.05	8.98	11.33	9.41	3.48	3.54
Soybean Field#: 4 Date: 9/30/82 (Julian: 273) Time: 13:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.00	4.76	3.62	4.16	4.33	4.57	4.91	1.57	3.19
2-5 cm	10.71	8.05	6.26	5.14	6.13	7.85	7.35	1.98	2.69
0-5 cm	9.63	6.73	5.21	4.74	5.41	6.54	6.38	1.82	2.89
Soybean Field#: 4 Date: 10/5/82 (Julian: 278) Time: 13:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.74	7.65	4.44	9.46	9.10	7.87	6.88	2.69	3.91
2-5 cm	8.92	10.30	9.30	10.34	12.62	11.85	10.56	1.43	1.36
0-5 cm	6.45	9.24	7.35	9.99	11.21	10.25	9.08	1.94	2.38
Soybean Field#: 4 Date: 10/12/82 (Julian: 285) Time: 12:35									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17.44	19.51	18.42	19.75	19.70	26.37	20.20	3.15	1.56
2-5 cm	20.51	18.20	17.88	19.22	21.28	24.55	20.27	2.47	1.22
0-5 cm	19.28	18.73	18.10	19.43	20.65	25.28	20.24	2.74	1.36
Soybean Field#: 4 Date: 10/14/82 (Julian: 287) Time: 11:10									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	16.66	16.17	17.77	17.19	8.51	16.01	15.38	3.43	2.23
2-5 cm	14.63	14.16	18.67	15.63	12.22	99.99	15.06	2.37	1.57
0-5 cm	15.44	14.97	18.31	16.25	10.73	99.99	15.19	2.79	1.84
Soybean Field#: 5 Date: 6/14/82 (Julian: 165) Time: 16 00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14.73	9.87	10.98	5.44	9.05	9.85	9.99	3.00	3.01
2-5 cm	17.26	12.85	13.89	99.99	16.65	19.79	16.09	2.77	1.72
0-5 cm	16.25	11.66	12.73	99.99	13.61	15.81	13.65	2.86	2.24
Soybean Field#: 5 Date: 6/16/82 (Julian: 167) Time: 11:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	25.55	26.68	22.36	22.01	27.89	23.76	24.71	2.38	0.96
2-5 cm	24.87	24.68	23.68	25.36	25.11	24.33	24.67	0.60	0.24
0-5 cm	25.14	25.48	23.15	24.02	26.22	24.10	24.69	1.31	0.53

Soybean Field#: 5 Date: 6/18/82 (Julian: 169) Time: 10:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.42	19.96	19.64	23.41	22.50	22.19	21.69	1.52	0.70
2-5 cm	19.84	20.37	20.87	23.18	23.12	23.11	21.75	1.55	0.71
0-5 cm	20.87	20.21	20.38	23.27	22.87	22.74	21.72	1.54	0.71
Soybean Field#: 5 Date: 6/21/82 (Julian: 172) Time: 13:50									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	3.19	12.22	8.93	9.48	5.91	5.28	7.50	3.29	4.39
2-5 cm	13.10	19.42	20.60	20.30	21.93	19.57	19.15	3.10	1.62
0-5 cm	9.14	16.54	15.93	15.98	15.52	13.85	14.49	3.18	2.73
Soybean Field#: 5 Date: 6/25/82 (Julian: 176) Time: 13:35									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	11.09	10.84	13.99	16.23	10.97	20.12	13.87	3.74	2.70
2-5 cm	18.31	20.02	18.08	18.93	18.89	14.44	18.11	1.92	1.06
0-5 cm	15.42	16.35	16.44	17.85	15.72	16.71	16.42	2.65	1.71
Soybean Field#: 5 Date: 6/28/82 (Julian: 179) Time: 10:42									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	25.16	22.77	22.23	23.75	24.75	22.45	23.52	1.24	0.53
2-5 cm	23.34	21.61	21.25	22.45	21.68	22.24	22.10	0.75	0.34
0-5 cm	24.07	22.07	21.64	22.97	22.91	22.33	22.66	0.95	0.41
Soybean Field#: 5 Date: 7/6/82 (Julian: 187) Time: 14:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	4.48	6.07	5.23	5.79	5.04	99.99	5.32	0.63	1.18
2-5 cm	15.46	12.37	16.74	16.71	13.65	15.14	15.01	1.73	1.15
0-5 cm	11.07	9.85	12.13	12.34	10.20	99.99	11.14	1.29	1.16
Soybean Field#: 5 Date: 7/7/82 (Julian: 188) Time: 15:09									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.44	1.39	0.87	1.38	0.87	1.99	1.49	0.62	4.18
2-5 cm	8.29	7.22	99.99	6.38	5.75	8.44	7.22	1.17	1.63
0-5 cm	5.95	4.89	99.99	4.38	3.80	5.86	4.93	0.95	2.65
Soybean Field#: 5 Date: 7/12/82 (Julian: 193) Time: 11:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6.39	7.66	9.53	10.19	13.46	13.28	10.09	2.88	2.85
2-5 cm	9.54	15.81	16.36	12.77	18.07	13.45	14.33	3.05	2.13
0-5 cm	8.28	12.55	13.63	11.74	16.23	13.38	12.64	2.98	2.42
Soybean Field#: 5 Date: 7/13/82 (Julian: 194) Time: 10:47									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	25.25	24.62	29.70	23.89	25.48	24.96	25.65	2.06	0.80
2-5 cm	21.87	21.87	24.62	22.46	24.63	22.41	22.98	1.30	0.57
0-5 cm	23.23	22.97	26.65	23.03	24.97	23.43	24.05	1.61	0.66

Soybean Field# 5 Date: 7/15/82 (Julian: 196) Time: 13:10									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	9.53	7.08	8.58	8.49	9.55	11.59	9.14	1.50	1.65
2-5 cm	13.74	14.00	14.55	12.51	15.04	16.59	14.40	1.37	0.95
0-5 cm	12.06	11.23	12.17	10.90	12.84	14.59	12.30	1.42	1.23
Soybean Field# 5 Date: 7/19/82 (Julian: 200) Time: 14:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.27	2.83	2.06	2.74	2.69	3.68	2.71	0.56	2.06
2-5 cm	5.02	6.02	8.18	5.63	5.68	9.54	6.68	1.77	2.66
0-5 cm	3.92	4.74	5.73	4.47	4.48	7.20	5.09	1.29	2.42
Soybean Field# 5 Date: 7/23/82 (Julian: 204) Time: 14:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	10.47	7.13	8.39	7.66	9.27	9.36	8.71	1.23	1.41
2-5 cm	16.63	14.64	15.21	12.99	14.24	14.77	14.75	1.19	0.81
0-5 cm	14.16	11.64	12.48	10.86	12.25	12.61	12.33	1.21	1.05
Soybean Field# 5 Date: 7/26/82 (Julian: 207) Time: 15:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2.82	2.45	2.63	2.87	2.69	3.39	2.81	0.32	1.15
2-5 cm	8.18	5.09	6.07	5.58	5.82	7.58	6.39	1.22	1.91
0-5 cm	6.04	4.03	4.69	4.49	4.57	5.90	4.95	0.86	1.60
Soybean Field# 5 Date: 7/28/82 (Julian: 209) Time: 10:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14.63	12.66	12.54	99.99	14.86	13.53	13.64	1.08	0.79
2-5 cm	12.90	12.08	17.34	12.23	12.62	8.13	12.55	2.93	2.34
0-5 cm	13.59	12.31	15.42	99.99	13.51	10.29	12.99	2.19	1.72
Soybean Field# 5 Date: 7/30/82 (Julian: 211) Time: 14:20									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6.04	4.67	5.49	4.88	6.16	7.87	5.85	1.15	1.97
2-5 cm	12.54	8.87	11.08	9.60	8.57	13.01	10.61	1.89	1.78
0-5 cm	9.94	7.19	8.84	7.71	7.61	10.95	8.71	1.60	1.86
Soybean Field# 5 Date: 8/4/82 (Julian: 216) Time: 10:24									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	3.25	2.50	2.82	3.02	3.55	3.84	3.16	0.49	1.54
2-5 cm	4.33	3.77	3.71	3.78	5.73	6.39	4.62	1.16	2.51
0-5 cm	3.90	3.26	3.35	3.48	4.86	5.37	4.04	0.89	2.12
Soybean Field# 5 Date: 8/9/82 (Julian: 221) Time: 14:18									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	12.65	15.98	9.21	16.30	17.02	13.50	14.11	2.94	2.09
2-5 cm	15.26	15.86	13.18	17.02	16.77	14.31	15.40	1.47	0.96
0-5 cm	14.22	15.91	11.59	16.73	16.87	13.98	14.88	2.06	1.41

III.c.3-15

Soybean Field# 5 Date: 8/16/82 (Julian: 228) Time: 15:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	24.36	22.27	23.57	23.27	23.36	25.47	23.71	1.09	0.46
2-5 cm	21.12	18.51	21.91	22.48	22.27	23.95	21.71	1.82	0.84
0-5 cm	22.42	20.01	22.57	22.79	22.70	24.55	22.51	1.53	0.69
Soybean Field# 5 Date: 9/9/82 (Julian: 252) Time: 15:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17.76	22.20	16.99	20.50	20.80	21.15	19.90	2.05	1.03
2-5 cm	17.59	21.20	16.38	19.68	19.45	20.38	19.11	1.80	0.94
0-5 cm	17.66	21.60	16.62	20.01	19.99	20.69	19.43	1.90	0.98
Soybean Field# 5 Date: 9/16/82 (Julian: 259) Time: 14:05									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.82	21.03	16.27	23.65	24.87	20.01	21.28	3.02	1.42
2-5 cm	22.17	19.08	17.17	23.56	22.83	19.40	20.70	2.51	1.21
0-5 cm	22.03	19.86	16.81	23.59	23.65	19.64	20.93	2.72	1.30
Soybean Field# 5 Date: 9/28/82 (Julian: 271) Time: 15:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.37	9.36	99.99	99.99	19.31	16.16	13.30	5.30	3.98
2-5 cm	16.38	14.92	13.43	15.15	18.44	16.12	15.74	1.68	1.07
0-5 cm	13.17	12.70	99.99	99.99	18.79	16.14	14.76	3.13	2.23
Soybean Field# 5 Date: 9/30/82 (Julian: 273) Time: 15:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6.83	2.35	7.50	8.53	18.93	15.01	9.86	6.03	6.11
2-5 cm	13.24	11.47	13.03	14.23	18.82	16.36	14.53	2.65	1.82
0-5 cm	10.68	7.82	10.82	11.95	18.86	15.82	12.66	4.00	3.54
Soybean Field# 5 Date: 10/5/82 (Julian: 278) Time: 15:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5.00	5.06	7.68	9.20	7.62	6.05	6.77	1.68	2.48
2-5 cm	13.17	16.14	12.27	16.73	16.51	14.16	14.83	1.89	1.28
0-5 cm	9.90	11.71	10.44	13.72	12.96	10.91	11.61	1.81	1.76
Soybean Field# 5 Date: 10/12/82 (Julian: 285) Time: 14:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21.54	16.18	19.17	21.60	23.95	22.97	20.90	2.82	1.35
2-5 cm	21.34	16.42	18.46	19.23	21.72	22.18	19.89	2.25	1.13
0-5 cm	21.42	16.32	18.74	20.18	22.61	22.50	20.30	2.48	1.22
Soybean Field# 5 Date: 10/14/82 (Julian: 287) Time: 15:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.78	22.09	23.29	21.37	21.52	19.35	21.73	1.38	0.63
2-5 cm	21.23	19.07	22.13	19.07	21.42	21.90	20.80	1.38	0.66
0-5 cm	21.85	20.28	22.59	19.99	21.46	20.88	21.18	1.38	0.65

III.c.3-16

Soybean Field#: 6 Date: 6/ 9/82 (Julian: 160) Time: 14:43									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	24 27	23.18	23.59	28 48	25 74	27 56	25.47	2.18	0.86
2-5 cm	25.75	23 97	23.65	25 76	27.18	26.59	25 48	1.40	0.55
0-5 cm	25.16	23.66	23.63	26.85	26.60	26.98	25 48	1.71	0.67
Soybean Field#: 6 Date: 6/14/82 (Julian: 165) Time: 16:20									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	21.70	24.22	23.06	28 84	26 60	32.02	26.07	3.87	1.49
2-5 cm	23 05	24.55	23.53	26 66	26.91	26.50	25 20	1.71	0.68
0-5 cm	22 51	24.42	23 34	27.53	26.78	28.71	25.55	2.57	1.00
Soybean Field#: 6 Date: 6/16/82 (Julian: 167) Time: 11:53									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	17 58	20.14	22.06	27 02	24 33	26.21	22 89	3 65	1 59
2-5 cm	19.04	20 86	21.64	25.12	27 14	32.01	24 30	4 79	1 97
0-5 cm	18 46	20 57	21 81	25 88	26.01	29.69	23.74	4 33	1.82
Soybean Field#: 6 Date: 6/18/82 (Julian: 169) Time: 14:05									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	21 91	20.96	21.48	26 53	22 49	21 36	22 45	2 06	0 92
2-5 cm	21.84	19.84	22 56	28 66	22 98	22.69	23 09	2.95	1.28
0-5 cm	21 87	20.29	22.13	27.81	22.78	22.16	22.84	2 60	1 13
Soybean Field#: 6 Date: 6/21/82 (Julian: 172) Time: 14:05									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	12.00	11.19	17.20	13 24	16 14	13 82	13 93	2 34	1.68
2-5 cm	16 28	16.85	19 27	19.75	20 53	19 40	18.68	1.71	0.91
0-5 cm	14.57	14.58	18.44	17.14	18 77	17.17	16 78	1.96	1.22
Soybean Field#: 6 Date: 6/25/82 (Julian: 176) Time: 13 51									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	12.49	15.11	15.35	16 69	19.03	17.00	15 95	2.20	1 38
2-5 cm	16.50	19 68	18.83	21 78	21 85	21.00	19 94	2.06	1.03
0-5 cm	14 90	17 85	17.44	19 75	20.72	19.40	18 34	2.12	1.17
Soybean Field#: 6 Date: 6/28/82 (Julian: 179) Time: 10:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	16.64	21 14	20 38	24.13	21.27	23.35	21 15	2.63	1 24
2-5 cm	17.14	20.74	21.33	22 87	22 20	22.73	21.17	2 14	1 01
0-5 cm	16.94	20 90	20 95	23.37	21.83	22 98	21.16	2 33	1.10
Soybean Field#: 6 Date: 7/ 6/82 (Julian: 187) Time: 14:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	6 02	4.48	10.17	5 22	3.52	1.46	5 15	2 92	5.68
2-5 cm	14 09	12.44	16 68	15.28	12.38	9.97	13 47	2 39	1.77
0-5 cm	10 86	9 26	14 08	11.26	8 83	6.57	10 14	2 60	3.33

III.c.3-17

Soybean Field#: 6 Date: 7/ 9/82 (Julian: 190) Time: 09:15									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	2.34	3 07	5.54	4.97	8.49	7 05	5.24	2.33	4.44
2-5 cm	10.99	9.74	10 77	15.17	13.64	11.86	12.03	2.02	1.68
0-5 cm	7 53	7.07	8.68	11 09	11.58	9.94	9.32	2 14	2.78
Soybean Field#: 6 Date: 7/12/82 (Julian: 193) Time: 13:15									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	1.92	9.43	5.93	7.94	99.99	7.34	6.51	2.86	4.39
2-5 cm	6.55	13.42	12.30	16.58	16.03	14 38	13.21	3.63	2.75
0-5 cm	4 70	11.82	9.75	13 12	99.99	11 57	10.53	3.32	3.40
Soybean Field#: 6 Date: 7/13/82 (Julian: 194) Time: 10:51									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	22.66	22.48	15.85	24.88	24.76	24.00	22.44	3.39	1.51
2-5 cm	19.09	18 33	18 90	22.17	22.05	99 99	20.11	1 85	0.92
0-5 cm	20.52	19 99	17.68	23.25	23.14	99.99	21 04	2 46	1 16
Soybean Field#: 6 Date: 7/15/82 (Julian: 196) Time: 14:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	5.73	7.40	7 78	12.32	12.51	8.20	8.99	2.78	3 10
2-5 cm	11.42	12.10	11.66	14.92	15.16	13.77	13 17	1 67	1 26
0-5 cm	9.15	10.22	10.11	13.88	14.10	11.54	11.50	2.11	2.00
Soybean Field#: 6 Date: 7/23/82 (Julian: 204) Time: 14:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	10.59	10.41	11 43	12 67	14.19	13.91	12 20	1.64	1.35
2-5 cm	16.17	13 64	13 89	16.13	16.35	15 05	15.20	1.21	0.80
0-5 cm	13.94	12.35	12.90	14.75	15 48	14.60	14.00	1.38	1.02
Soybean Field#: 6 Date: 7/26/82 (Julian: 207) Time: 14:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	1.75	1 84	2 87	4 12	3.74	3.91	3 04	1.05	3 47
2-5 cm	4 26	8 36	7 72	10.73	7.22	9 78	8.01	2.25	2 81
0-5 cm	3.25	5.75	5 78	8.09	5.83	7.43	6 02	1 77	3 08
Soybean Field#: 6 Date: 7/28/82 (Julian: 209) Time: 10:35									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	12.54	10 02	15.74	10.17	15 66	12.67	12.80	2 51	1.96
2-5 cm	7.58	5 39	13 14	99.99	13.41	12 00	10.30	3 61	3.50
0-5 cm	9.56	7.24	14.18	99 99	14.31	12 26	11 30	3.17	2 89
Soybean Field#: 6 Date: 7/30/82 (Julian: 211) Time: 14:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S D./Mean
0-2 cm	5.74	9 08	7.68	11 81	10.29	10 69	9.21	2 21	2 40
2-5 cm	8.31	12.48	11.61	11.28	12.80	13 60	11.68	1.85	1.58
0-5 cm	7 28	11 12	10 04	11 49	11.79	12.43	10 69	1.99	1.91

III c.3-18

Soybean		Field#:	6	Date:	8/ 4/82 (Julian: 216)	Time: 10:40	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	2 26	2 42	2 81	3 29	3 03	3 08	2 81	0 40	1 43
2-5 cm	2 72	3 00	3 52	4 84	4 02	6 35	4 08	1 35	3 30
0-5 cm	2 53	2 77	3 24	4 22	3 63	5 04	3 57	0 97	2 55
Soybean		Field#:	6	Date:	8/ 9/82 (Julian: 221)	Time: 14 30	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	9 97	11 74	10 95	15 79	14 34	13 67	12 74	2 22	1 74
2-5 cm	11 26	10 58	11 59	14 77	16 12	14 30	13 10	2 25	1 72
0-5 cm	10 75	11 04	11 34	15 18	15 41	14 05	12 96	2 24	1 73
Soybean		Field#:	6	Date:	8/16/82 (Julian: 228)	Time: 14:45	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19 24	19 17	18 40	21 72	19 59	19 69	19 64	1 12	0 57
2-5 cm	16 74	16 17	16 83	20 20	19 24	18 38	17 93	1 60	0 89
0-5 cm	17 74	17 37	17 46	20 81	19 38	18 91	18 61	1 41	0 76
Soybean		Field#:	6	Date:	9/ 9/82 (Julian: 252)	Time: 11:20	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13 51	14 81	13 65	17 06	15 16	13 61	14 63	1 38	0 94
2-5 cm	13 36	13 21	12 75	16 15	15 96	14 78	14 37	1 48	1 03
0-5 cm	13 42	13 85	13 11	16 52	15 64	14 31	14 47	1 44	0 99
Soybean		Field#:	6	Date:	9/16/82 (Julian: 259)	Time: 13:40	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13 13	14 91	12 48	16 31	15 19	17 87	14 98	1 99	1 33
2-5 cm	13 81	7 14	13 47	14 02	15 56	18 14	13 69	3 64	2 66
0-5 cm	13 54	10 24	13 07	14 93	15 41	18 03	14 21	2 98	2 13
Soybean		Field#:	6	Date:	9/28/82 (Julian: 271)	Time:	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	3 37	5 10	4 04	4 77	4 04	6 23	4 59	1 01	2 19
2-5 cm	4 60	9 27	7 08	7 89	5 45	10 79	7 51	2 32	3 09
0-5 cm	4 11	7 60	5 86	6 64	4 88	8 97	6 34	1 79	2 73
Soybean		Field#:	6	Date:	9/30/82 (Julian: 273)	Time:	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	3 04	5 01	4 53	3 10	3 81	4 73	4 04	0 85	2 10
2-5 cm	4 56	8 96	8 05	6 67	6 48	5 51	6 70	1 61	2 40
0-5 cm	3 95	7 38	6 64	5 24	5 41	5 20	5 64	1 30	2 28
Soybean		Field#:	7	Date:	7/19/82 (Julian: 200)	Time: 15:20	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	99 99	8 20	9 70	6 01	17 12	16 77	11 56	5 09	4 40
2-5 cm	17 90	19 13	16 92	16 88	19 43	16 42	17 78	1 26	0 71
0-5 cm	99 99	14 76	14 03	12 53	18 51	16 56	15 29	2 79	2 19

III.c 3-19

Soybean		Field#:	7	Date:	7/26/82 (Julian: 207)	Time: 10:30	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14 30	22 56	29 88	28 86	24 83	19 71	23 36	5 85	2 50
2-5 cm	17 95	24 92	26 74	27 07	26 14	19 79	23 77	3 91	1 64
0-5 cm	16 49	23 97	28 00	27 78	25 61	19 76	23 60	4 68	1 99
Soybean		Field#:	7	Date:	7/28/82 (Julian: 209)	Time: 10:25	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19 92	20 23	24 46	25 61	17 79	10 98	19 83	5 24	2 64
2-5 cm	18 96	19 12	21 52	24 63	20 62	13 53	19 73	3 67	1 86
0-5 cm	19 34	19 57	22 70	25 02	19 49	12 51	19 77	4 30	2 17
Soybean		Field#:	7	Date:	7/30/82 (Julian: 211)	Time: 14:30	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17 63	12 65	26 47	20 70	23 34	14 72	19 25	5 25	2 73
2-5 cm	19 55	21 93	27 66	20 62	25 78	16 61	22 03	4 08	1 85
0-5 cm	18 78	18 22	27 18	20 65	24 81	15 85	20 92	4 55	2 20
Soybean		Field#:	7	Date:	8/ 4/82 (Julian: 216)	Time: 10:25	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	15 20	12 98	8 90	18 79	4 98	3 29	10 69	6 03	5 64
2-5 cm	15 63	17 77	17 74	19 61	9 83	4 98	14 26	5 67	3 98
0-5 cm	15 46	15 85	14 21	19 28	7 89	4 30	12 83	5 81	4 64
Soybean		Field#:	7	Date:	8/ 9/82 (Julian: 221)	Time: 14 20	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	15 67	18 36	8 89	3 30	19 71	11 27	12 87	6 24	4 85
2-5 cm	16 50	19 14	18 73	20 05	19 55	10 94	17 49	3 43	1 96
0-5 cm	16 17	18 83	14 80	13 35	19 62	11 07	15 64	4 56	3 12
Soybean		Field#:	7	Date:	8/16/82 (Julian: 228)	Time: 14:00	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	20 89	20 89	25 51	99 99	99 99	19 72	21 75	2 56	1 18
2-5 cm	19 55	22 61	27 24	99 99	99 99	17 96	21 84	4 08	1 87
0-5 cm	20 09	21 92	26 55	99 99	99 99	18 66	21 81	3 48	1 59
Soybean		Field#:	7	Date:	9/ 9/82 (Julian: 252)	Time: 11:20	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13 11	22 19	19 92	17 67	17 58	14 91	17 56	3 28	1 87
2-5 cm	11 92	20 63	21 54	16 74	16 70	14 23	16 96	3 67	2 17
0-5 cm	12 39	21 25	20 89	17 11	17 05	14 50	17 20	3 52	2 05
Soybean		Field#:	7	Date:	9/16/82 (Julian: 259)	Time	S.D.		S.D./Mean
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14 80	19 34	22 71	20 32	10 67	14 72	17 09	4 45	2 61
2-5 cm	16 18	19 37	21 02	19 73	12 61	15 64	17 42	3 16	1 81
0-5 cm	15 63	19 36	21 69	19 96	11 83	15 28	17 29	3 68	2 13

III c 3-20

Soybean Field#: 7 Date: 9/28/82 (Julian: 271) Time: 10:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5.19	10.66	12.69	10.79	4.37	8.06	8.63	3.33	3.86
2-5 cm	8.63	13.69	16.36	12.66	7.73	6.90	11.00	3.79	3.45
0-5 cm	7.25	12.48	14.90	11.91	6.39	7.37	10.05	3.61	3.61
Soybean Field#: 7 Date: 9/30/82 (Julian: 273) Time: 10:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	4.47	10.57	8.26	6.01	4.26	4.91	6.41	2.51	3.91
2-5 cm	5.13	13.66	10.46	9.10	6.04	6.47	8.48	3.24	3.82
0-5 cm	4.87	12.43	9.58	7.87	5.33	5.85	7.65	2.95	3.86
Soybean Field#: 7 Date: 10/ 5/82 (Julian: 278) Time: 11:20									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	9.74	11.76	8.14	12.66	5.52	7.19	9.17	2.74	2.99
2-5 cm	11.57	13.68	11.49	14.88	8.38	7.66	11.28	2.84	2.52
0-5 cm	10.84	12.92	10.15	13.99	7.24	7.47	10.43	2.80	2.71
Soybean Field#: 7 Date: 10/10/82 (Julian: 280) Time: 11:20									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6.12	7.70	7.15	10.75	6.95	5.35	7.34	1.87	2.54
2-5 cm	8.41	9.87	11.05	11.43	8.09	7.82	9.45	1.57	1.66
0-5 cm	7.50	9.00	9.49	11.16	7.63	6.83	8.60	1.69	2.01
Soybean Field#: 7 Date: 10/12/82 (Julian: 285) Time: 11:25									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	18.63	21.46	20.85	22.74	22.82	16.80	20.55	2.39	1.16
2-5 cm	18.47	21.13	19.85	21.50	19.99	17.65	19.77	1.49	0.75
0-5 cm	18.53	21.26	20.25	22.00	21.12	17.31	20.08	1.85	0.92
Soybean Field#: 7 Date: 10/14/82 (Julian: 287) Time: 11:25									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	11.41	20.39	21.18	22.45	19.19	16.79	18.57	4.00	2.15
2-5 cm	99.99	21.62	21.22	19.77	99.99	17.56	20.04	1.84	0.92
0-5 cm	99.99	21.13	21.20	20.84	99.99	17.25	19.45	2.70	1.41
Soybean Field#: 7 Date: 10/19/82 (Julian: 292) Time: 13:20									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17.20	12.55	13.18	11.09	14.93	10.23	13.20	2.56	1.94
2-5 cm	17.03	16.79	18.52	15.87	15.74	11.89	15.97	2.24	1.40
0-5 cm	17.10	15.09	16.39	13.96	15.42	11.22	14.86	2.37	1.62
Soybean Field#: 7 Date: 10/21/82 (Julian: 294) Time: 13:20									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6.51	18.34	14.56	22.16	20.29	11.52	15.56	5.88	3.78
2-5 cm	12.84	19.46	18.78	21.06	20.71	14.43	17.88	3.43	1.92
0-5 cm	10.31	19.01	17.09	21.50	20.54	13.27	16.95	4.41	2.66

Soybean Field#: 7 Date: 10/26/82 (Julian: 299) Time: 10:00									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5.49	14.91	10.81	21.88	12.56	11.50	12.86	5.41	4.20
2-5 cm	11.57	17.28	17.21	19.93	18.19	13.62	16.30	3.10	1.90
0-5 cm	9.14	16.33	14.65	20.71	15.94	12.77	14.92	4.02	2.82
Soybean Field#: 7 Date: 11/ 1/82 (Julian: 305) Time: 10:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	23.02	23.76	25.92	25.47	23.63	19.73	23.59	2.20	0.93
2-5 cm	20.66	22.58	23.96	99.99	23.28	19.48	21.99	1.87	0.85
0-5 cm	21.60	23.05	24.74	99.99	23.42	19.58	22.63	2.00	0.88
Soybean Field#: 8 Date: 7/ 9/82 (Julian: 190) Time: 10:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	12.74	18.14	17.22	20.85	15.65	22.03	17.77	3.40	1.91
2-5 cm	17.93	18.49	20.33	99.99	99.99	19.32	19.02	1.04	0.55
0-5 cm	15.85	18.35	19.09	99.99	99.99	20.41	18.52	1.99	1.10
Soybean Field#: 8 Date: 7/12/82 (Julian: 193) Time: 10:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17.57	17.18	19.72	8.94	6.31	19.82	14.92	5.82	3.90
2-5 cm	17.30	20.73	17.98	16.08	16.51	19.70	18.05	1.83	1.01
0-5 cm	17.41	19.31	18.67	13.22	12.43	19.75	16.80	3.42	2.17
Soybean Field#: 8 Date: 7/13/82 (Julian: 194) Time: 10:40									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17.20	14.78	18.81	8.90	9.88	17.85	14.57	4.24	2.91
2-5 cm	13.70	13.91	19.00	8.38	14.60	20.29	14.98	4.26	2.84
0-5 cm	15.10	14.26	18.92	8.59	12.72	19.32	14.82	4.25	2.87
Soybean Field#: 8 Date: 7/19/82 (Julian: 200) Time: 15:18									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	20.04	19.82	17.87	6.78	4.12	10.23	13.14	7.00	5.32
2-5 cm	19.31	20.56	17.89	15.38	9.93	15.06	16.35	3.81	2.33
0-5 cm	19.60	20.26	17.88	11.94	7.60	13.13	15.07	5.09	3.53
Soybean Field#: 8 Date: 7/26/82 (Julian: 207) Time: 10:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	13.77	14.93	22.98	6.86	11.65	17.60	14.63	5.45	3.73
2-5 cm	18.57	18.17	23.13	11.43	16.34	19.39	17.84	3.86	2.16
0-5 cm	16.65	16.87	23.07	9.60	14.46	18.68	16.56	4.49	2.79
Soybean Field#: 8 Date: 7/28/82 (Julian: 209) Time: 11:30									
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	8.37	15.06	17.12	8.55	6.78	11.49	11.23	4.11	3.66
2-5 cm	12.90	14.14	17.94	10.71	9.77	14.81	13.38	2.96	2.21
0-5 cm	11.09	14.51	17.61	9.84	8.57	13.48	12.52	3.42	2.79

Soybean Field#: 8 Date: 8/ 4/82 (Julian: 216) Time: 11:52
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 3.83 1.10 0.35 0.53 0.60 0.55 1.16 1.33 11.48
 2-5 cm 6.54 2.09 0.98 0.98 0.68 1.77 2.17 2.21 10.15
 0-5 cm 5.46 1.70 0.73 0.80 0.65 1.28 1.77 1.86 10.68

Soybean Field#: 8 Date: 8/ 9/82 (Julian: 221) Time: 15:12
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 9.29 7.21 5.07 6.64 6.01 11.97 7.70 2.53 3.28
 2-5 cm 11.10 12.38 13.22 10.57 10.44 12.58 11.71 1.16 0.99
 0-5 cm 10.38 10.31 9.96 9.00 8.66 12.34 10.11 1.71 1.91

Soybean Field#: 8 Date: 8/16/82 (Julian: 228) Time: 13:50
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 15.72 17.13 16.93 15.37 14.33 21.22 16.78 2.41 1.43
 2-5 cm 15.86 17.25 17.23 15.65 14.50 16.85 16.22 1.08 0.67
 0-5 cm 15.81 17.20 17.11 15.53 14.43 18.60 16.45 1.61 0.98

Soybean Field#: 8 Date: 9/ 9/82 (Julian: 252) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 14.96 16.72 14.57 13.33 13.02 15.74 14.72 1.41 0.96
 2-5 cm 14.42 15.98 13.10 12.81 13.11 15.25 14.11 1.31 0.93
 0-5 cm 14.64 16.28 13.69 13.02 13.08 15.44 14.36 1.35 0.94

Soybean Field#: 8 Date: 9/16/82 (Julian: 259) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 15.21 16.65 8.22 13.40 13.26 15.90 13.77 3.04 2.20
 2-5 cm 14.72 16.57 17.99 14.16 13.06 16.23 15.46 1.80 1.17
 0-5 cm 14.92 16.60 14.08 13.86 13.14 16.10 14.78 2.30 1.58

Soybean Field#: 8 Date: 9/28/82 (Julian: 271) Time: 11 05
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 6.06 7.91 6.67 3.71 4.90 8.78 6.34 1.87 2.96
 2-5 cm 8.54 10.14 9.17 6.97 8.87 10.75 9.07 1.32 1.45
 0-5 cm 7.55 9.24 8.17 5.67 7.29 9.96 7.98 1.54 2.06

Soybean Field#: 8 Date: 9/30/82 (Julian: 273) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 3.82 4.64 5.58 4.01 4.19 3.66 4.32 0.70 1.63
 2-5 cm 7.01 8.76 9.70 7.83 7.95 6.59 7.97 1.14 1.43
 0-5 cm 5.73 7.11 8.05 6.30 6.45 5.41 6.51 0.96 1.51

Soybean Field#: 8 Date: 10/ 5/82 (Julian: 278) Time: 11:35
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 9.80 7.59 10.08 5.26 4.96 5.80 7.25 2.28 3.14
 2-5 cm 11.10 99.99 11.18 8.16 7.78 9.31 9.50 1.60 1.68
 0-5 cm 10.58 99.99 10.74 7.00 6.65 7.90 8.60 1.87 2.27

Soybean Field#: 8 Date: 10/ 7/82 (Julian: 280) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 8.36 10.98 5.26 6.96 5.41 10.19 7.86 2.41 3.06
 2-5 cm 10.92 11.17 8.14 7.88 8.66 11.86 9.77 1.74 1.78
 0-5 cm 9.90 11.09 6.99 7.51 7.36 11.19 9.01 2.01 2.29

Soybean Field#: 8 Date: 10/12/82 (Julian: 285) Time: 13:40
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 16.18 15.52 15.58 15.09 15.73 16.81 15.82 0.60 0.38
 2-5 cm 17.17 16.40 16.95 15.85 16.04 17.94 16.73 0.78 0.47
 0-5 cm 16.77 16.05 16.40 15.55 15.92 17.49 16.36 0.71 0.43

Soybean Field#: 8 Date: 10/14/82 (Julian: 287) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 14.44 14.99 16.87 11.55 13.12 10.14 13.52 2.44 1.80
 2-5 cm 12.83 15.60 17.34 13.38 18.93 13.58 15.27 2.45 1.61
 0-5 cm 13.47 15.35 17.15 12.65 16.60 12.20 14.57 2.45 1.69

Soybean Field#: 8 Date: 10/19/82 (Julian: 292) Time: 13:00
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 7.47 9.72 6.31 8.80 11.39 6.85 8.42 1.92 2.28
 2-5 cm 14.03 15.68 13.18 10.76 12.20 15.27 13.52 1.87 1.38
 0-5 cm 11.41 13.29 10.43 9.97 11.88 11.90 11.48 1.89 1.74

Soybean Field#: 8 Date: 10/21/82 (Julian: 294) Time: 10:40
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 11.55 8.55 6.69 6.85 10.98 11.40 9.34 2.26 2.43
 2-5 cm 14.44 13.71 12.32 9.75 13.69 12.40 12.72 1.67 1.32
 0-5 cm 13.29 11.65 10.07 8.59 12.61 12.00 11.37 1.91 1.76

Soybean Field#: 9 Date: 7/ 6/82 (Julian: 187) Time: 15:02
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 18.59 12.17 6.49 7.18 5.30 6.56 9.38 5.11 5.44
 2-5 cm 22.07 15.29 11.89 13.15 8.84 11.70 13.82 4.55 3.29
 0-5 cm 20.68 14.04 9.73 10.76 7.43 9.64 12.05 4.78 4.15

Soybean Field#: 9 Date: 7/ 9/82 (Julian: 190) Time: 10:42
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 4.94 3.03 2.14 3.09 2.09 3.23 3.09 1.03 3.35
 2-5 cm 8.97 5.11 2.57 6.55 2.68 9.59 5.91 3.02 5.10
 0-5 cm 7.36 4.28 2.40 5.17 2.44 7.04 4.78 2.22 4.40

Soybean Field#: 9 Date: 7/13/82 (Julian: 194) Time: 11:32
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 9.16 3.56 99.99 6.01 7.60 17.65 8.80 5.37 6.10
 2-5 cm 8.67 6.90 9.23 11.05 10.50 11.23 9.60 1.67 1.73
 0-5 cm 8.87 5.56 99.99 9.04 9.34 13.80 9.28 3.15 3.48

Soybean		Field#:	9	Date:	7/19/82 (Julian: 200)	Time: 15:04		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	10.68	5.24	0.82	1.30	9.81	99.99	5.57	4.61
2-5 cm	11.99	6.16	9.07	6.16	10.95	99.99	8.87	2.68
0-5 cm	11.47	5.79	5.77	4.22	10.50	99.99	7.55	3.45
							S.D.	S.D./Mean
0-2 cm							8.28	
2-5 cm							3.03	
0-5 cm							5.13	
Soybean		Field#:	9	Date:	7/26/82 (Julian: 207)	Time: 10:30		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	5.09	4.79	5.68	5.67	7.97	5.76	5.83	1.12
2-5 cm	5.86	6.08	10.79	6.56	11.01	5.91	7.70	2.49
0-5 cm	5.55	5.57	8.75	6.21	9.79	5.85	6.95	1.94
							S.D.	S.D./Mean
0-2 cm							1.92	
2-5 cm							3.23	
0-5 cm							2.71	
Soybean		Field#:	9	Date:	7/28/82 (Julian: 209)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	4.35	7.23	2.17	3.13	6.08	4.63	4.60	1.85
2-5 cm	8.53	9.31	9.31	4.03	10.26	5.54	7.83	2.47
0-5 cm	6.86	8.48	6.46	3.67	8.59	5.18	6.54	2.22
							S.D.	S.D./Mean
0-2 cm							4.03	
2-5 cm							3.15	
0-5 cm							3.51	
Soybean		Field#:	9	Date:	8/ 2/82 (Julian: 214)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	99.99	6.40	6.37	5.83	7.40	6.17	6.43	0.58
2-5 cm	10.02	8.35	8.02	12.15	9.50	7.83	9.31	1.64
0-5 cm	99.99	7.57	7.36	9.62	8.66	7.17	8.16	1.21
							S.D.	S.D./Mean
0-2 cm							0.91	
2-5 cm							1.76	
0-5 cm							1.42	
Soybean		Field#:	9	Date:	8/ 4/82 (Julian: 216)	Time: 11:35		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	0.71	0.72	0.45	1.47	0.83	0.45	0.77	0.38
2-5 cm	0.58	1.25	0.90	1.24	1.07	0.62	0.94	0.30
0-5 cm	0.63	1.04	0.72	1.33	0.97	0.55	0.88	0.33
							S.D.	S.D./Mean
0-2 cm							4.84	
2-5 cm							3.15	
0-5 cm							3.82	
Soybean		Field#:	9	Date:	8/ 9/82 (Julian: 221)	Time: 15:22		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	4.71	3.95	8.14	5.16	2.84	9.40	5.70	2.53
2-5 cm	9.63	16.33	9.97	12.07	9.57	9.97	11.25	2.65
0-5 cm	7.66	11.38	9.24	9.30	6.88	9.74	9.03	2.61
							S.D.	S.D./Mean
0-2 cm							4.45	
2-5 cm							2.36	
0-5 cm							3.19	
Soybean		Field#:	9	Date:	8/16/82 (Julian: 228)	Time: 13:40		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	14.91	14.70	13.42	16.29	17.53	13.49	15.06	1.61
2-5 cm	14.71	14.65	15.13	20.16	15.40	14.28	15.72	2.21
0-5 cm	14.79	14.67	14.44	18.61	16.25	13.96	15.46	1.97
							S.D.	S.D./Mean
0-2 cm							1.07	
2-5 cm							1.41	
0-5 cm							1.27	
Soybean		Field#:	9	Date:	9/ 9/82 (Julian: 252)	Time: 11:00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	11.24	11.21	9.83	14.19	10.69	12.06	11.54	1.49
2-5 cm	11.19	11.58	9.50	14.44	10.07	11.23	11.34	1.71
0-5 cm	11.21	11.43	9.63	14.34	10.32	11.57	11.42	1.63

Soybean		Field#:	9	Date:	9/16/82 (Julian: 259)	Time: 13:05		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	10.61	10.87	11.55	23.08	13.47	13.23	13.80	4.70
2-5 cm	9.24	10.56	11.92	12.75	13.68	13.27	11.90	1.71
0-5 cm	9.79	10.68	11.77	16.88	13.60	13.25	12.66	2.91
							S.D.	S.D./Mean
0-2 cm							1.44	
2-5 cm							2.22	
0-5 cm							2.91	
Soybean		Field#:	9	Date:	9/28/82 (Julian: 271)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	3.20	3.35	3.99	4.11	3.99	2.98	3.60	0.48
2-5 cm	5.86	4.36	4.55	5.65	5.90	5.69	5.34	0.69
0-5 cm	4.79	3.96	4.32	5.03	5.14	4.61	4.64	0.61
							S.D.	S.D./Mean
0-2 cm							1.34	
2-5 cm							1.30	
0-5 cm							1.31	
Soybean		Field#:	9	Date:	9/30/82 (Julian: 273)	Time: 09:55		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	2.91	2.89	3.19	3.27	2.91	2.91	3.01	0.17
2-5 cm	3.62	3.88	-0.13	3.95	4.66	3.38	3.23	1.70
0-5 cm	3.34	3.48	1.20	3.68	3.96	3.19	3.14	1.09
							S.D.	S.D./Mean
0-2 cm							0.57	
2-5 cm							5.27	
0-5 cm							3.39	
Soybean		Field#:	9	Date:	10/ 5/82 (Julian: 278)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	99.99	4.97	8.05	7.61	3.18	4.99	5.76	2.03
2-5 cm	7.71	6.90	7.14	9.61	99.99	4.61	7.19	1.79
0-5 cm	99.99	6.13	7.50	8.81	99.99	4.76	6.62	1.89
							S.D.	S.D./Mean
0-2 cm							3.53	
2-5 cm							2.49	
0-5 cm							2.91	
Soybean		Field#:	9	Date:	10/ 7/82 (Julian: 280)	Time: 11:20		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	5.46	6.44	4.81	7.04	4.85	4.37	5.49	1.04
2-5 cm	99.99	5.64	5.73	6.63	99.99	4.94	5.73	0.69
0-5 cm	99.99	5.96	5.36	6.79	99.99	4.71	5.64	0.83
							S.D.	S.D./Mean
0-2 cm							1.90	
2-5 cm							1.21	
0-5 cm							1.49	
Soybean		Field#:	9	Date:	10/12/82 (Julian: 285)	Time: 13:40		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	16.12	15.24	14.14	15.31	17.61	14.75	15.53	1.21
2-5 cm	16.96	14.67	12.31	15.14	17.24	16.09	15.40	1.81
0-5 cm	16.62	14.90	13.04	15.21	17.39	15.55	15.45	1.57
							S.D.	S.D./Mean
0-2 cm							1.02	
2-5 cm							1.81	
0-5 cm							1.57	
Soybean		Field#:	9	Date:	10/14/82 (Julian: 287)	Time: 11:55		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	15.73	18.37	13.97	16.74	19.25	18.54	17.10	2.00
2-5 cm	16.03	16.69	13.46	16.12	17.37	18.59	16.38	1.71
0-5 cm	15.91	17.36	13.66	16.37	18.12	18.57	16.67	1.83
							S.D.	S.D./Mean
0-2 cm							1.17	
2-5 cm							2.00	
0-5 cm							1.05	
Soybean		Field#:	9	Date:	10/19/82 (Julian: 292)	Time: 12:50		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.
0-2 cm	13.72	13.86	12.22	17.11	16.63	9.70	13.87	2.77
2-5 cm	14.10	15.32	13.45	17.20	16.54	11.81	14.74	2.02
0-5 cm	13.95	14.74	12.96	17.17	16.58	10.96	14.39	2.32

Soybean	Field#	9	Date	10/21/82	(Julian: 294)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	12 55	11 67	12 93	13 39	14 77	14 34	13 28	1 15	0.86
2-5 cm	15 37	13 25	13 33	13 79	15 65	13 29	14 11	1 10	0.78
0-5 cm	14 25	12 62	13 17	13 63	15 30	13 71	13 78	1 12	0.82
Soybean	Field#	9	Date	10/26/82	(Julian: 299)	Time:	10:30		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	11 99	11 71	5 66	13 38	8 33	14 48	10 92	3 31	3.03
2-5 cm	9 12	12 75	10 46	14 58	11 92	5 20	10 67	3 27	3.07
0-5 cm	10 27	12 33	8 54	14 10	10 48	8 91	10 77	3 29	3.05
Soybean	Field#	10	Date	6/14/82	(Julian: 165)	Time:	10:09		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	21 06	20 78	28 26	25 92	23 65	22 55	23 70	2 92	1.23
2-5 cm	35 31	34 71	36 33	38 67	41 03	40 24	37 72	2 65	0.70
0-5 cm	29 61	29 14	33 10	33 57	34 08	33 16	32 11	2 76	0.91
Soybean	Field#	10	Date	6/16/82	(Julian: 167)	Time:			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17 24	22 45	25 43	18 53	19 96	17 21	20 14	3 26	1.62
2-5 cm	40 75	42 46	42 94	40 43	35 76	38 98	40 22	2 61	0.65
0-5 cm	31 35	34 46	35 94	31 67	29 44	30 27	32 19	2 87	1.04
Soybean	Field#	10	Date	6/21/82	(Julian: 172)	Time	10:50		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	18 60	25 55	10 96	19 58	18 65	19 65	18 83	4 66	2.47
2-5 cm	31 38	34 14	30 00	29 82	33 14	32 06	31 76	1 71	0.54
0-5 cm	26 27	30 70	22 39	25 72	27 35	27 09	26 59	2 89	1.31
Soybean	Field#	10	Date	6/25/82	(Julian: 176)	Time:	10 00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	19 04	18 12	17 40	19 94	99 99	26 52	20 20	3 66	1 81
2-5 cm	37 98	34 33	35 70	33 71	33 69	30 18	34 27	2 57	0.75
0-5 cm	30 40	27 84	28 38	28 20	99 99	28 72	28 64	3 01	1.17
Soybean	Field#	10	Date	6/28/82	(Julian: 179)	Time:	14:55		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	29 28	24 81	23 82	21 71	26 41	25 95	25 33	2 56	1.01
2-5 cm	34 77	31 81	32 55	39 35	21 26	32 72	32 08	5 96	1 86
0-5 cm	32 58	29 01	29 06	32 29	23 32	30 01	29 38	4 60	1 52
Soybean	Field#	10	Date	7/ 7/82	(Julian: 188)	Time:	10:00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	4 76	4 98	5 19	6 50	8 45	6 76	6 11	1 41	2 32
2-5 cm	9 29	13 71	13 77	16 91	17 48	14 81	14 33	2 93	2 04
0-5 cm	7 48	10 22	10 34	12 75	13 87	11 59	11 04	2 32	2 15

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Soybean	Field#	10	Date	7/23/82	(Julian: 204)	Time:	10:00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	6 96	7 25	6 71	8 11	5 78	8 51	7 22	0 98	1 36
2-5 cm	15 64	13 23	17 55	16 44	12 77	14 70	15 06	1 85	1 23
0-5 cm	12 17	10 84	13 21	13 11	9 97	12 22	11 92	1 51	1 28
Soybean	Field#	10	Date	7/26/82	(Julian: 207)	Time:	11:00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	99 99	9 59	7 47	12 80	9 74	12 14	10 35	2 15	2 08
2-5 cm	99 99	20 43	11 98	17 63	15 17	14 11	15 86	3 26	2 06
0-5 cm	99 99	16 09	10 18	15 70	13 00	13 32	13 66	2 82	2 06
Soybean	Field#	10	Date	7/28/82	(Julian: 209)	Time:	14:30		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5 54	9 72	6 64	8 33	7 56	9 46	7 87	1 62	2 06
2-5 cm	20 88	15 88	15 85	16 42	13 71	16 25	16 50	2 36	1 43
0-5 cm	14 75	13 42	12 17	13 19	11 25	13 53	13 05	2 07	1 68
Soybean	Field#	10	Date	7/30/82	(Julian: 211)	Time:	09:30		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	14 85	9 38	9 24	10 71	10 22	11 05	10 91	2 06	1 89
2-5 cm	99 99	10 83	10 15	12 21	6 57	13 97	10 74	2 75	2 56
0-5 cm	99 99	10 25	9 79	11 61	8 03	12 80	10 81	2 48	2 29
Soybean	Field#	10	Date	8/ 2/82	(Julian: 214)	Time:	11:00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	17 49	17 97	17 55	17 34	16 55	18 14	17 51	0 56	0 32
2-5 cm	21 19	17 74	23 78	18 90	16 43	18 78	19 47	2 63	1 35
0-5 cm	19 71	17 83	21 29	18 28	16 48	18 52	18 68	1 80	0 94
Soybean	Field#	10	Date	8/ 3/82	(Julian: 215)	Time:	11:47		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	7 43	7 03	10 52	9 21	10 42	11 51	9 35	1 80	1 93
2-5 cm	11 14	5 38	11 78	12 39	13 63	14 82	11 52	3 29	2 85
0-5 cm	9 65	6 04	11 27	11 12	12 35	13 50	10 66	2 69	2 48
Soybean	Field#	10	Date	8/ 4/82	(Julian: 216)	Time:	15:13		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	5 70	6 05	8 44	5 77	8 89	9 02	7 31	1 63	2 23
2-5 cm	7 59	9 86	10 02	9 75	12 00	12 80	10 34	1 85	1 78
0-5 cm	6 84	8 34	9 39	8 16	10 76	11 28	9 13	1 76	1 96
Soybean	Field#	10	Date	9/23/82	(Julian: 266)	Time:	13:00		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	99 99	8 22	2 19	5 04	3 11	7 32	4 34	3 10	7 16
2-5 cm	7 90	7 16	3 21	7 31	8 96	5 32	6 65	2 06	3 10
0-5 cm	4 80	7 59	2 80	6 40	6 62	6 12	5 72	2 48	4 72

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Soybean	Field#:	10	Date:	9/28/82	(Julian:	271)	Time:		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	18.52	11.48	15.78	19.97	23.75	25.20	19.12	5.08	2.66
2-5 cm	27.73	28.52	27.08	32.05	33.47	34.19	30.51	3.10	1.02
0-5 cm	24.05	21.70	22.56	27.22	29.58	30.59	25.95	3.89	1.67

Soybean	Field#:	10	Date:	9/30/82	(Julian:	273)	Time:	12:05	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	15.02	16.78	11.85	18.53	19.38	27.88	18.24	5.43	2.98
2-5 cm	24.95	24.58	23.85	25.69	24.36	32.61	26.01	3.29	1.27
0-5 cm	20.98	21.46	19.05	22.82	22.37	30.72	22.90	4.15	1.95

APPENDIX III.d

SOIL BULK DENSITY DATA

1. M_g and BD data
2. Statistics for correlations between M_g and BD values.

Wheat Field#: 1 Date: 4/26/82 (Julian.116) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 15.60 0.22 0.14 1.315
 2-5 cm 16.31 0.24 0.15 1.384
 0-5 cm 16.03 0.23 0.14 1.356

Wheat Field#: 1 Date: 6/29/82 (Julian.180) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 34.83 1.26 0.36 1.426
 2-5 cm 32.63 1.03 0.32 1.120
 0-5 cm 33.51 1.12 0.33 1.242

Depth FLD Mean(Mg) Mean(BD)
 0-2 cm 25.21 1.370
 2-5 cm 24.47 1.252
 0-5 cm 24.77 1.299

Wheat Field#: 2 Date: 4/26/82 (Julian.116) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 12.73 1.68 1.32 1.194
 2-5 cm 13.67 1.53 1.12 1.263
 0-5 cm 13.29 1.59 1.20 1.235

Wheat Field#: 2 Date: 6/29/82 (Julian.180) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 30.94 1.09 0.35 1.383
 2-5 cm 29.19 1.02 0.35 1.151
 0-5 cm 29.89 1.05 0.35 1.244

Depth FLD Mean(Mg) Mean(BD)
 0-2 cm 21.83 1.288
 2-5 cm 21.43 1.207
 0-5 cm 21.59 1.240

Wheat Field#: 3 Date: 4/26/82 (Julian.116) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 13.31 3.32 2.50 1.211
 2-5 cm 14.20 3.16 2.23 1.280
 0-5 cm 13.84 3.23 2.34 1.253

Wheat Field#: 3 Date: 6/29/82 (Julian.180) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 23.84 0.76 0.32 1.399
 2-5 cm 24.38 0.67 0.27 1.156
 0-5 cm 24.16 0.71 0.29 1.253

Depth FLD Mean(Mg) Mean(BD)
 0-2 cm 18.57 1.305
 2-5 cm 19.29 1.218
 0-5 cm 19.00 1.253

Wheat Field#: 4 Date: 4/26/82 (Julian.116) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 7.78 0.06 0.08 1.361
 2-5 cm 8.84 0.06 0.06 1.430
 0-5 cm 8.42 0.06 0.07 1.403

Wheat Field#: 4 Date: 6/29/82 (Julian.180) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 34.37 1.56 0.45 1.561
 2-5 cm 33.28 1.33 0.40 1.170
 0-5 cm 33.71 1.42 0.42 1.327

Depth FLD Mean(Mg) Mean(BD)
 0-2 cm 21.07 1.461
 2-5 cm 21.06 1.300
 0-5 cm 21.06 1.365

Wheat	Field#: 5	Date: 4/26/82	(Julian:116)	Time:	Wheat	Field#: 7	Date: 4/26/82	(Julian:116)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)
0-2 cm	7.43	1.13	1.52	1.373	0-2 cm	7.77	1.33	1.71	1.217
2-5 cm	8.51	1.10	1.29	1.442	2-5 cm	8.97	1.13	1.26	1.286
0-5 cm	8.08	1.11	1.38	1.414	0-5 cm	8.49	1.21	1.44	1.258
Wheat	Field#: 5	Date: 6/29/82	(Julian:180)	Time:	Wheat	Field#: 7	Date: 6/29/82	(Julian:180)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)
0-2 cm	19.94	2.56	1.28	1.402	0-2 cm	14.18	1.66	1.17	1.062
2-5 cm	20.41	1.02	0.50	1.189	2-5 cm	17.37	1.25	0.72	1.050
0-5 cm	20.22	1.63	0.81	1.274	0-5 cm	16.09	1.42	0.90	1.055
Depth	FLD Mean(Mg)	Mean(BD)			Depth	FLD Mean(Mg)	Mean(BD)		
0-2 cm	13.69	1.387			0-2 cm	10.97	1.139		
2-5 cm	14.46	1.315			2-5 cm	13.17	1.168		
0-5 cm	14.15	1.344			0-5 cm	12.29	1.157		
Wheat	Field#: 6	Date: 4/26/82	(Julian:116)	Time:	Wheat	Field#: 8	Date: 4/26/82	(Julian:116)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)
0-2 cm	7.95	0.00	0.00	1.251	0-2 cm	9.06	0.35	0.39	1.136
2-5 cm	9.10	0.03	0.04	1.321	2-5 cm	10.26	0.34	0.33	1.205
0-5 cm	8.64	0.02	0.02	1.293	0-5 cm	9.78	0.34	0.35	1.178
Wheat	Field#: 6	Date: 6/29/82	(Julian:180)	Time:	Wheat	Field#: 8	Date: 6/29/82	(Julian:180)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)
0-2 cm	14.29	2.68	1.88	1.345	0-2 cm	25.81	0.46	0.18	1.421
2-5 cm	17.05	1.34	0.78	1.213	2-5 cm	25.30	0.50	0.20	1.041
0-5 cm	15.95	1.87	1.22	1.266	0-5 cm	25.50	0.49	0.19	1.193
Depth	FLD Mean(Mg)	Mean(BD)			Depth	FLD Mean(Mg)	Mean(BD)		
0-2 cm	11.12	1.298			0-2 cm	17.44	1.279		
2-5 cm	13.07	1.267			2-5 cm	17.78	1.123		
0-5 cm	12.29	1.280			0-5 cm	17.64	1.185		

Wheat				Field#: 9				Date: 4/26/82 (Julian:116)				Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Corn	Field#: 1	Date: 6/ 3/82 (Julian:154)	Time:		
0-2 cm	10.34	0.59	0.57	1 078	0-2 cm	29.08	1.05	0.36	1.325	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	
2-5 cm	11.52	0.51	0.45	1.148	2-5 cm	27.89	1.02	0.37	1.213	0-2 cm	29.08	1.05	0.36	1.325	
0-5 cm	11.04	0.55	0.50	1.120	0-5 cm	28.36	1.03	0.36	1.258	2-5 cm	27.89	1.02	0.37	1.213	
Wheat				Field#: 9				Date: 6/29/82 (Julian:180)				Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Corn	Field#: 1	Date: 7/19/82 (Julian:200)	Time:	10:05	
0-2 cm	32.50	1.56	0.48	1 155	0-2 cm	9.85	1.83	1.85	1.353	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	
2-5 cm	34.21	1.05	0.31	0 945	2-5 cm	12.92	1.35	1.05	1.354	0-2 cm	9.85	1.83	1.85	1.353	
0-5 cm	33.52	1.25	0.38	1.029	0-5 cm	11.69	1.54	1.37	1.354	2-5 cm	12.92	1.35	1.05	1.354	
Wheat				FLD Mean(Mg)				Mean(BD)				Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Corn	Field#: 1	Date: 9/ 2/82 (Julian:245)	Time:	14:18	
0-2 cm	21.42	1.117			0-2 cm	13.12	1.34	1.02	1.274	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	
2-5 cm	22.86	1.046			2-5 cm	17.02	0.23	0.14	1.450	0-2 cm	13.12	1.34	1.02	1.274	
0-5 cm	22.28	1.075			0-5 cm	15.46	0.68	0.49	1.379	2-5 cm	17.02	0.23	0.14	1.450	
Wheat				Field#: 10				Date: 4/26/82 (Julian:116)				Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	FLD Mean(Mg)	Mean(BD)			Corn	Field#: 1	Date: 9/ 2/82 (Julian:245)	Time:	14:18	
0-2 cm	4.33	0.07	0.16	1 471	0-2 cm	17.35	1.317			Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	
2-5 cm	5.48	0.00	0.00	1.540	2-5 cm	19.28	1.339			0-2 cm	17.35	1.317			
0-5 cm	5.02	0.03	0.06	1 512	0-5 cm	18.51	1.330			2-5 cm	19.28	1.339			
Wheat				Field#: 10				Date: 6/29/82 (Julian:180)				Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Corn	Field#: 2	Date: 6/ 3/82 (Julian 154)	Time:	14:05	
0-2 cm	15.02	0.39	0.26	1 390	0-2 cm	28.51	0.89	0.31	1 284	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	
2-5 cm	15.55	0.93	0.60	1 378	2-5 cm	29.61	0.78	0.26	1 134	0-2 cm	28.51	0.89	0.31	1 284	
0-5 cm	15.34	0.71	0.46	1 383	0-5 cm	29.17	0.82	0.28	1.194	2-5 cm	29.61	0.78	0.26	1 134	
Wheat				FLD Mean(Mg)				Mean(BD)				Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Corn	Field#: 2	Date: 7/19/82 (Julian:200)	Time:	10:05	
0-2 cm	9.68	1.430			0-2 cm	12.75	1.94	1.52	1 214	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	
2-5 cm	10.52	1.459			2-5 cm	19.99	1.65	0.82	1.259	0-2 cm	12.75	1.94	1.52	1 214	
0-5 cm	10.18	1.448			0-5 cm	17.10	1.76	1.10	1 241	2-5 cm	19.99	1.65	0.82	1.259	
Wheat				Field#: 2				Date: 9/ 2/82 (Julian 245)				Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Corn	Field#: 2	Date: 9/ 2/82 (Julian 245)	Time:	14:00	
0-2 cm	20.29	1.18	0.58	1.212	0-2 cm	20.52	1.237			Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	
2-5 cm	20.87	0.62	0.30	1.288	2-5 cm	23.49	1.227			0-2 cm	20.29	1.18	0.58	1.212	
0-5 cm	20.64	0.84	0.41	1.257	0-5 cm	22.30	1.231			2-5 cm	20.87	0.62	0.30	1.288	
Wheat				FLD Mean(Mg)				Mean(BD)				Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)	Depth	FLD Mean(Mg)	Mean(BD)			0-5 cm	20.64	0.84	0.41	1.257	
0-2 cm	20.52	1.237			0-2 cm	20.52	1.237			Depth	FLD Mean(Mg)	Mean(BD)			
2-5 cm	23.49	1.227			2-5 cm	23.49	1.227			0-2 cm	20.52	1.237			
0-5 cm	22.30	1.231			0-5 cm	22.30	1.231			2-5 cm	23.49	1.227			

Corn	Field#	Date	S.D.	S.D./Mean	Mean(BD)	Time
Depth	3	6/3/82			154	14.33
0-2 cm	Mean(Mg)	1.41	0.54	1.344		
2-5 cm	25.31	1.40	0.55	1.311		
0-5 cm	25.55	1.40	0.55	1.324		
Corn	Field#	Date	S.D.	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	3	7/19/82			200	10.50
0-2 cm	Mean(Mg)	1.02	0.78	1.124		
2-5 cm	17.89	0.47	0.26	1.184		
0-5 cm	15.93	0.69	0.47	1.160		
Corn	Field#	Date	S.D.	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	3	9/2/82			245	14.07
0-2 cm	Mean(Mg)	0.88	0.47	1.185		
2-5 cm	19.76	0.55	0.28	1.272		
0-5 cm	19.28	0.68	0.36	1.237		
Depth	FLD Mean(Mg)	Mean(BD)				
0-2 cm	19.15	1.217				
2-5 cm	20.98	1.255				
0-5 cm	20.25	1.240				
Corn	Field#	Date	S.D.	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	4	6/3/82			154	15.10
0-2 cm	Mean(Mg)	2.42	1.07	1.499		
2-5 cm	27.89	1.90	0.68	1.120		
0-5 cm	25.78	2.11	0.84	1.272		
Depth	FLD Mean(Mg)	Mean(BD)				
0-2 cm	19.15	1.217				
2-5 cm	20.98	1.255				
0-5 cm	20.25	1.240				
Corn	Field#	Date	S.D.	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	4	7/19/82			200	14.00
0-2 cm	Mean(Mg)			0		
2-5 cm	15.37			1.207		
0-5 cm				0		
Corn	Field#	Date	S.D.	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	4	8/31/82			243	15.20
0-2 cm	Mean(Mg)	0.66	0.58	1.522		
2-5 cm	16.94	0.37	0.22	1.671		
0-5 cm	14.73	0.48	0.36	1.611		
Depth	FLD Mean(Mg)	Mean(BD)				
0-2 cm	17.01	1.511				
2-5 cm	20.07	1.333				
0-5 cm	18.84	1.404				

III.d.1-7

Corn	Field#	Date	S.D.	S.D./Mean	Mean(BD)	Time
Depth	5	6/3/82			154	
0-2 cm	Mean(Mg)	1.25	0.41	1.428		
2-5 cm	27.60	1.38	0.50	1.089		
0-5 cm	28.77	1.33	0.46	1.225		
Corn	Field#	Date	S.D. <td>S.D./Mean <td>Mean(BD)</td> <td>Time</td> </td>	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	5	7/19/82			200	
0-2 cm	Mean(Mg)	0.96	0.87	1.487		
2-5 cm	15.65	0.92	0.58	1.400		
0-5 cm	13.76	0.93	0.70	1.435		
Corn	Field#	Date	S.D. <td>S.D./Mean <td>Mean(BD)</td> <td>Time</td> </td>	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	5	8/31/82			243	15.30
0-2 cm	Mean(Mg)	2.14	1.21	1.351		
2-5 cm	20.67	1.23	0.60	1.523		
0-5 cm	19.52	1.60	0.84	1.454		
Depth	FLD Mean(Mg)	Mean(BD)				
0-2 cm	19.75	1.422				
2-5 cm	21.31	1.338				
0-5 cm	20.68	1.371				
Corn	Field#	Date	S.D. <td>S.D./Mean <td>Mean(BD)</td> <td>Time</td> </td>	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	6	6/3/82			154	
0-2 cm	Mean(Mg)	0.71	0.34	1.397		
2-5 cm	19.88	0.56	0.28	1.254		
0-5 cm	20.44	0.62	0.30	1.311		
Corn	Field#	Date	S.D. <td>S.D./Mean <td>Mean(BD)</td> <td>Time</td> </td>	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	6	6/17/82			168	14.42
0-2 cm	Mean(Mg)	0.59	0.31	1.521		
2-5 cm	18.29	0.66	0.36	1.366		
0-5 cm	18.67	0.63	0.34	1.428		
Corn	Field#	Date	S.D. <td>S.D./Mean <td>Mean(BD)</td> <td>Time</td> </td>	S.D./Mean <td>Mean(BD)</td> <td>Time</td>	Mean(BD)	Time
Depth	6	7/19/82			200	14.10
0-2 cm	Mean(Mg)	0.85	1.57	1.467		
2-5 cm	9.91	1.12	1.13	1.221		
0-5 cm	8.12	1.01	1.31	1.319		
Depth	FLD Mean(Mg)	Mean(BD)				
0-2 cm	15.31	1.461				
2-5 cm	16.03	1.280				
0-5 cm	15.74	1.353				

III.d.1-8

Corn	Field#:	7	Date:	6/ 3/82	(Julian:154)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	34 15	1.27	0.37	1 183		
2-5 cm	37.10	1.52	0.41	1.079		
0-5 cm	35 92	1.42	0.39	1.121		

Corn	Field#:	7	Date:	7/20/82	(Julian:201)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	11.87	1.82	1.53	1.100		
2-5 cm	21 91	1.54	0.70	1.347		
0-5 cm	17 90	1.65	1.03	1.248		

Corn	Field#:	7	Date:	8/31/82	(Julian:243)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	26.21	0.92	0.35	1.375		
2-5 cm	32 65	2.25	0.69	1.478		
0-5 cm	30.08	1.72	0.55	1.437		

Depth	FLD Mean(Mg)	Mean(BD)
0-2 cm	24.08	1 219
2-5 cm	30.56	1.301
0-5 cm	27.96	1.268

Corn	Field#:	8	Date:	6/ 3/82	(Julian:154)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	33.22	0.97	0.29	1.116		
2-5 cm	34 63	1.12	0.32	0.962		
0-5 cm	34 06	1.06	0.31	1.024		

Corn	Field#:	8	Date:	7/20/82	(Julian:201)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	11.45	1.22	1.07	1.461		
2-5 cm	21.05	1.58	0.75	1.179		
0-5 cm	17 21	1.44	0.88	1.292		

Corn	Field#:	8	Date:	8/31/82	(Julian:243)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	23 90	2.06	0.86	1.242		
2-5 cm	27.44	0.66	0.24	1.224		
0-5 cm	26.02	1 22	0.49	1 231		

Depth	FLD Mean(Mg)	Mean(BD)
0-2 cm	22.86	1 273
2-5 cm	27.70	1.122
0-5 cm	25 77	1.182

Corn	Field#:	9	Date:	6/ 3/82	(Julian:154)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	32.76	3.78	1.15	1.401		
2-5 cm	30.04	1.32	0.44	1.132		
0-5 cm	31.13	2.30	0.73	1.240		

Corn	Field#:	9	Date:	7/20/82	(Julian:201)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	8.64	2 32	2.69	1.360		
2-5 cm	11.98	1.96	1.63	1 182		
0-5 cm	10 65	2 10	2 05	1.253		

Corn	Field#:	9	Date:	8/31/82	(Julian:243)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	25.34	0.87	0.34	1 302		
2-5 cm	24.81	0.31	0.12	1.379		
0-5 cm	25 02	0.53	0.21	1.348		

Depth	FLD Mean(Mg)	Mean(BD)
0-2 cm	22.25	1.354
2-5 cm	22.28	1.231
0-5 cm	22 27	1.280

Corn	Field#:	10	Date:	6/ 3/82	(Julian:154)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	28 68	2.22	0.77	1 427		
2-5 cm	30 67	0.28	0.09	1 210		
0-5 cm	29.87	1 06	0 36	1 297		

Corn	Field#:	10	Date:	7/20/82	(Julian:201)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm	10 32	1 11	1 08	1.209		
2-5 cm	15 90	0.89	0.56	1.264		
0-5 cm	13.67	0.98	0.77	1.242		

Corn	Field#:	10	Date:	/99	(Julian:999)	Time:
Depth	Mean(Mg)	S.D.	S.D./Mean	Mean(BD)		
0-2 cm				0		
2-5 cm				0		
0-5 cm				0		

Depth	FLD Mean(Mg)	Mean(BD)
0-2 cm	19.50	1.318
2-5 cm	23.28	1 237
0-5 cm	21.77	1.269

Soybean Field#: 1 Date: 7/19/82 (Julian:200) Time: 10.05

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 24.26 0.70 0.29 1.549
2-5 cm 24.74 0.92 0.37 1.544
0-5 cm 24.55 0.83 0.34 1.546

Soybean Field#: 1 Date: 9/ 2/82 (Julian:245) Time:

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 24.37 0.86 0.35 1.321
2-5 cm 23.95 0.81 0.34 1.470
0-5 cm 24.12 0.83 0.34 1.410

Soybean Field#: 1 Date: 9/23/82 (Julian:266) Time:

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 16.69 1.78 1.07 1.261
2-5 cm 17.85 1.49 0.83 1.177
0-5 cm 17.39 1.61 0.93 1.210

Depth FLD Mean(Mg) Mean(BD)

0-2 cm 21.77 1.377
2-5 cm 22.18 1.397
0-5 cm 22.02 1.389

Soybean Field#: 2 Date: 7/20/82 (Julian:201) Time:

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 24.46 1.28 0.52 1.413
2-5 cm 23.12 0.60 0.26 1.334
0-5 cm 23.66 0.87 0.36 1.366

Soybean Field#: 2 Date: 9/ 2/82 (Julian:245) Time:

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 16.33 1.48 0.90 1.467
2-5 cm 16.95 0.44 0.26 1.466
0-5 cm 16.70 0.85 0.52 1.466

Soybean Field#: 2 Date: 9/23/82 (Julian:266) Time: 14.35

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 14.50 0.78 0.54 1.206
2-5 cm 14.23 0.85 0.60 1.331
0-5 cm 14.34 0.82 0.57 1.281

Depth FLD Mean(Mg) Mean(BD)

0-2 cm 18.43 1.362
2-5 cm 18.10 1.377
0-5 cm 18.23 1.371

III.d.1-11

Soybean Field#: 3 Date: 6/22/82 (Julian:173) Time:

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 19.36 0.75 0.39 1.131
2-5 cm 21.53 1.25 0.58 1.052
0-5 cm 20.66 1.05 0.50 1.084

Soybean Field#: 3 Date: 7/27/82 (Julian:208) Time:

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 6.33 0.39 0.61 1.452
2-5 cm 9.49 1.08 1.14 1.319
0-5 cm 8.23 0.80 0.93 1.373

Soybean Field#: 3 Date: 9/ 2/82 (Julian:245) Time:

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 13.06 1.96 1.50 1.242
2-5 cm 16.10 1.46 0.90 1.574
0-5 cm 14.88 1.66 1.14 1.441

Depth FLD Mean(Mg) Mean(BD)

0-2 cm 12.92 1.275
2-5 cm 15.71 1.315
0-5 cm 14.59 1.299

Soybean Field#: 4 Date: 6/22/82 (Julian:173) Time:

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 16.26 0.92 0.57 1.114
2-5 cm 20.30 0.89 0.44 1.336
0-5 cm 18.68 0.90 0.49 1.247

Soybean Field#: 4 Date: 7/19/82 (Julian:200) Time: 11.15

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 7.59 0.94 1.24 1.202
2-5 cm 11.82 0.45 0.38 1.011
0-5 cm 10.13 0.65 0.73 1.088

Soybean Field#: 4 Date: 9/ 2/82 (Julian:245) Time: 14:15

Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
0-2 cm 15.31 0.51 0.33 1.253
2-5 cm 16.35 0.83 0.51 1.362
0-5 cm 15.94 0.70 0.44 1.318

Depth FLD Mean(Mg) Mean(BD)

0-2 cm 13.05 1.190
2-5 cm 16.16 1.236
0-5 cm 14.92 1.218

III d 1-12

Soybean Field#: 5 Date: 6/22/82 (Julian:173) Time: 13:00
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 12.81 0.70 0.54 1.309
 2-5 cm 18.89 0.81 0.43 1.306
 0-5 cm 16.46 0.76 0.47 1.307

Soybean Field#: 5 Date: 7/19/82 (Julian:200) Time: 13:53
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 3.20 0.26 0.80 1.335
 2-5 cm 7.38 0.55 0.75 1.143
 0-5 cm 5.71 0.43 0.77 1.220

Soybean Field#: 5 Date: 9/30/82 (Julian:273) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 11.36 2.67 2.35 1.277
 2-5 cm 14.53 1.18 0.82 1.219
 0-5 cm 13.26 1.78 1.43 1.242

Depth FLD Mean(Mg) Mean(BD)
 0-2 cm 9.13 1.307
 2-5 cm 13.60 1.223
 0-5 cm 11.81 1.256

Soybean Field#: 6 Date: 6/22/82 (Julian:173) Time: 13:18
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 17.14 1.32 0.77 1.383
 2-5 cm 20.13 0.75 0.37 1.299
 0-5 cm 18.93 0.98 0.53 1.333

Soybean Field#: 6 Date: 7/19/82 (Julian:200) Time: 14:30
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 2.59 0.71 2.73 1.303
 2-5 cm 6.08 0.92 1.52 1.275
 0-5 cm 4.68 0.84 2.00 1.286

Soybean Field#: 6 Date: 8/31/82 (Julian:243) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 16.62 0.69 0.42 1.284
 2-5 cm 15.53 0.37 0.24 1.046
 0-5 cm 15.97 0.50 0.31 1.141

Depth FLD Mean(Mg) Mean(BD)
 0-2 cm 12.12 1.323
 2-5 cm 13.91 1.207
 0-5 cm 13.19 1.253

III.d.1-13

Soybean Field#: 7 Date: 7/20/82 (Julian:201) Time: 10:18
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 11.68 2.35 2.01 1.530
 2-5 cm 18.92 0.82 0.43 1.431
 0-5 cm 16.03 1.43 1.06 1.470

Soybean Field#: 7 Date: 8/31/82 (Julian:243) Time: 15:40
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 18.62 1.16 0.63 1.307
 2-5 cm 18.74 1.33 0.71 1.363
 0-5 cm 18.69 1.26 0.68 1.341

Soybean Field#: 7 Date: 9/28/82 (Julian:271) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 8.63 1.49 1.73 1.729
 2-5 cm 11.05 1.67 1.51 1.481
 0-5 cm 10.08 1.60 1.60 1.580

Depth FLD Mean(Mg) Mean(BD)
 0-2 cm 12.98 1.522
 2-5 cm 16.24 1.425
 0-5 cm 14.93 1.464

Soybean Field#: 8 Date: 7/27/82 (Julian:208) Time: 10:25
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 10.15 1.44 1.42 1.469
 2-5 cm 14.23 1.19 0.84 1.357
 0-5 cm 12.59 1.29 1.07 1.402

Soybean Field#: 8 Date: 8/31/82 (Julian:243) Time: 15:45
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 16.52 0.94 0.57 1.237
 2-5 cm 15.75 0.31 0.20 0.899
 0-5 cm 16.06 0.56 0.35 1.034

Soybean Field#: 8 Date: 9/28/82 (Julian:271) Time:
 Depth Mean(Mg) S.D. S.D./Mean Mean(BD)
 0-2 cm 6.34 0.84 1.32 1.300
 2-5 cm 9.07 0.59 0.65 1.325
 0-5 cm 7.98 0.69 0.92 1.315

Depth FLD Mean(Mg) Mean(BD)
 0-2 cm 11.00 1.335
 2-5 cm 13.02 1.194
 0-5 cm 12.21 1.250

III.d.1-14

Soybean Field#: 9 Date: 7/27/82 (Julian:208) Time:				Soybean Field#:21 Date: 6/22/82 (Julian:173) Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Depth	Mean(Mg)	S.D.	S.D./Mean
0-2 cm	6.48	1.08	1.67	0-2 cm	17.96	0.38	0.21
2-5 cm	10.47	0.62	0.59	2-5 cm	20.25	0.30	0.15
0-5 cm	8.87	0.81	1.02	0-5 cm	19.34	0.33	0.17
Soybean Field#: 9 Date: 8/31/82 (Julian:243) Time: 15:45				Soybean Field#:21 Date: 7/27/82 (Julian:208) Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Depth	Mean(Mg)	S.D.	S.D./Mean
0-2 cm	12.84	1.32	1.02	0-2 cm	6.77	0.32	0.47
2-5 cm	12.36	0.30	0.24	2-5 cm	9.64	0.65	0.68
0-5 cm	12.55	0.70	0.55	0-5 cm	8.49	0.52	0.60
Soybean Field#: 9 Date: 9/28/82 (Julian:271) Time:				Soybean Field#:21 Date: 9/30/82 (Julian:273) Time:			
Depth	Mean(Mg)	S.D.	S.D./Mean	Depth	Mean(Mg)	S.D.	S.D./Mean
0-2 cm	3.60	0.22	0.60	0-2 cm	6.04	0.50	0.83
2-5 cm	5.34	0.31	0.58	2-5 cm	11.59	0.70	0.60
0-5 cm	4.64	0.27	0.59	0-5 cm	9.37	0.62	0.69
Depth FLD Mean(Mg) Mean(BD)				Depth FLD Mean(Mg) Mean(BD)			
0-2 cm	7.64	1.298		0-2 cm	10.26	1.289	
2-5 cm	9.39	1.336		2-5 cm	13.83	1.303	
0-5 cm	8.69	1.320		0-5 cm	12.40	1.297	
Soybean Field# 10 Date: 6/22/82 (Julian:173) Time:							
Depth	Mean(Mg)	S.D.	S.D./Mean				
0-2 cm	33.37	2.31	0.69				
2-5 cm	38.36	1.09	0.28				
0-5 cm	36.36	1.58	0.45				
Soybean Field#:10 Date: 8/31/82 (Julian:243) Time:							
Depth	Mean(Mg)	S.D.	S.D./Mean				
0-2 cm	36.28	1.75	0.48				
2-5 cm	35.22	1.01	0.29				
0-5 cm	35.65	1.30	0.36				
Soybean Field#:10 Date: 7/20/82 (Julian:201) Time:							
Depth	Mean(Mg)	S.D.	S.D./Mean				
0-2 cm	10.03	1.26	1.25				
2-5 cm	20.88	1.90	0.91				
0-5 cm	16.54	1.65	1.05				
Depth FLD Mean(Mg) Mean(BD)							
0-2 cm	26.56	1.041					
2-5 cm	31.49	1.058					
0-5 cm	29.52	1.051					

III d 1-15

III.d 1-16

APPENDIX III.e

CROP CONDITION AND GROWTH-STAGE CODES

1. Crop Condition Codes
2. Growth-Stage Codes

III.e

CROP CONDITION CODES

Crop Damage:

Type: I - Insects
 W - Wind
 R - Rain, Water
 H - Hail
 F - Frost
 D - Disease

Scale: 0 - Nil
 1 - Light
 2 - Moderate
 3 - Heavy

Weediness:

 0 - Nil
 1 - Light
 2 - Moderate
 3 - Heavy

COLLECTING PERIODIC CROP
DEVELOPMENT DATA

CROP GROWTH STAGES CODES

Barley, Oats, Wheat and Rye Crop Growth Stages

<u>CODE</u>	<u>STAGE</u>
<u>PLANT EMERGENCE AND TILLERING</u>	
10	Undetermined; plant emergence and tillering substage not detectable.
11	Emergence from soil, single shoot.
12	Primary leaf stage, from two-five leaves.
13	Early tillering, one-two tillers visible.
14	Full tillering, three or more tillers visible.
<u>VEGETATIVE GROWTH</u>	
20	Undetermined; vegetative growth substage not detectable.
21	First node of stem visible at base of shoot.
22	Second node on stem visible.
23	Last leaf visible, flag leaf, but still rolled as it emerges from last sheath.
24	Early to mid boot, leaf sheath swollen.
25	Mid to late boot, leaf sheath swollen, tip of head may be visible.
<u>HEADING AND FLOWERING</u>	
30	Undetermined; heading and flowering substage not detectable.
31	Early heading, heads just visible as they push out of split in sheath of flag leaf.
32	Heading complete, all of head emerged from sheath.
33	Flowering, stem fully elongated and yellow antlers visible on outside of heads.
34	Kernels formed, kernels visible in head but are very tender and watery.
<u>RIPENING AND SEED DEVELOPMENT</u>	
40	Undetermined; ripening and seed development substage not detectable.
41	Milk Stage, contents of kernels like heavy cream.
42	Soft Dough Stage, contents of kernel soft but becoming dry.
43	Hard Dough Stage, kernel may be dented with fingernail with difficulty.
<u>MATURITY</u>	
50	Undetermined; maturity substage not detectable.
51	Ripe for cutting, kernel at hard dough stage but straw not completely dead.
52	Ripe for cutting, kernel at hard dough stage and straw completely dead.
53	Post ripe stage, crop still standing, becoming darker in color.
<u>HARVEST</u>	
60	Undetermined; harvest substage not detectable.
61	Crop harvested by combine; straw and stubble on surface.
62	Crop harvested by combine; straw raked, stacked, baled, and removed from soil surface.
63	Crop windrowed or swathed, not yet threshed.
64	Crop windrowed or swathed, followed by threshing with combine, straw and stubble on soil surface.
65	Crop windrowed or swathed, followed by threshing with combine, straw raked, stacked, or baled and removed from soil surface.

Corn Growth Stages

<u>CODE</u>	<u>STAGE</u>
<u>PLANT EMERGENCE</u>	
10	Undetermined; plant emergence substage not detectable.
11	Plant emergence; tip of coleoptile visible above soil surface.
12	One or two leaves fully emerged from coleoptile.
<u>VEGETATIVE GROWTH</u>	
20	Undetermined; vegetative substage not detectable.
21	Three-four leaves emerged.
22	Five-eight leaves fully emerged.
23	Nine-twelve leaves fully emerged.
24	Thirteen-sixteen leaves fully emerged; lower four-five leaves perhaps lost leaving eight-nine functional leaves; tassel developed but still enclosed within whorl; brace roots from lower nodes are now developing.
25	Seventeen-twenty leaves fully emerged.
26	More than twenty leaves fully emerged.
<u>HEADING AND FLOWERING</u>	
30	Undetermined; heading and flowering substage not detectable.
31	Tips of tassels visible from whorl of leaves.
32	Tassels fully emerging; all leaves fully emerged; some silks starting to emerge from tip of husks.
33	Silks nearly fully emerged; pollen shedding.
<u>RIPENING AND SEED DEVELOPMENT</u>	
40	Undetermined; ripening and seed development substage not detectable.
41	Kernels in blister stage; cob, husks, and ear shank approaching full size; about twelve days after silking.
42	Soft dough or just past "roasting ear" stage; about twenty-four days after silking.
43	Beginning dent stage; a few kernels showing dents about thirty-six days after silking.
44	Full dent stage; all kernels fully dented but not dry; husks on ear and leaves starting to senesce.
<u>MATURITY</u>	
50	Undetermined; maturity substage not detectable.
51	Physiological maturity; about sixty days after silking; black layer formed at base of most kernels; some of remaining leaves still green.
52	Physiological maturity; black layer formed; leaves dried up and bright yellow.
53	Post maturity; crop still standing with leaves, stalks, and ear husks turning dark color.
<u>HARVEST</u>	
60	Undetermined; harvest substage not detectable.
61	Crop harvested green before full maturity for use as silage.
62	Crop harvested for grain with corn picker; ear only removed and plants still partially standing.
63	Crop harvested for grain with combine; plants reduced to stubble and residue.
64	Ear and entire plant removed; very little residue on soil surface.

Soybeans Growth Stages

<u>CODE</u>	<u>STAGE</u>
<u>PLANT EMERGENCE</u>	
10	Undetermined; plant emergence substage not detectable.
11	Cotyledons emerged above soil surface.
12	First true leaf; appearance of two unifoliate (single leaflet) leaves above cotyledons.
<u>VEGETATIVE GROWTH</u>	
20	Undetermined; vegetative growth substage not detectable.
21	Plant has two or less nodes. If two nodes are present, one is at the unifoliate leaves and the second at the first trifoliate leaf.
22	Plant has three-four nodes on the main stem, each with fully developed leaves. Node at unifoliate leaves is counted as No. 1.
23	Plant has five or more nodes on main stem. Vegetative stages can continue for several weeks before entering reproductive stage.
<u>HEADING AND FLOWERING</u>	
30	Undetermined; heading and flowering substage not detectable.
31	One open flower at any node on the main stem.
32	Full bloom; open flower at one of the two uppermost nodes on main stem.
<u>RIPENING AND SEED DEVELOPMENT</u>	
40	Undetermined; ripening and seed development substage not detectable.
41	Pod, 1/4 inch long, at one of the four uppermost nodes on main stem with fully developed leaf.
42	Full pod; pod one inch long at one of the four uppermost nodes on main stem with fully developed leaf.
43	Beginning seed; seed bean 1/8 inch long in a pod at one of the four uppermost nodes on the main stem.
44	Full seed stage; seed fills the pod cavity at one of the four uppermost nodes on the main stem, bottom leaves starting to turn yellow.
<u>MATURITY</u>	
50	Undetermined; maturity substage not detectable.
51	Physiological maturity; leaves on plant should range from green at the top of the plant to yellow and falling off at the bottom; one yellow or brown pod with seeds completely yellow, free of green color, on the main stem.
52	Harvest maturity; 95% of pods are brown, most leaves have fallen from plant.
<u>HARVEST</u>	
60	Undetermined; harvest substage not detectable.
61	Crop harvested with combine; stubble and plant residue sufficient to cover soil surface.
62	Harvested with combine; soil surface exposed with small amount of stubble and residue.

APPENDIX III.f

GROWTH-STAGE OBSERVATIONS

III.f

FIELD	DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS	FIELD	DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS
W1	05/07/82				X			06/03/82	41	R-3	0	X	LODGING
	05/20/82	33	D-1	0	X			06/10/82	42	D-2, R-2	0	X	
	05/27/82	34	D-1	0	X	LODGING		06/17/82	42	W-3, R-3	0	X	
	06/01/82	40	D-1, R-2	0	X			06/24/82	42	W-2, R-2	0	X	
	06/03/82	41	R-2	0	X	LODGING		07/01/82	61			X	
	06/10/82	41	D-2, R-2	0	X	RUST	W6	05/07/82	33	D-1	0	X	
	06/17/82	41	D-2, R-2	0	X	RUST		05/20/82	34	D-2	0	X	
	06/24/82	42	R-2, W-2	0	X			06/01/82	40	R-3	0	X	
	06/29/82	61						06/03/82	41	D-2	0	X	
	07/01/82							06/10/82	42	D-3, R-2	0	X	LEAVES COMPLETELY DRY
W2	05/07/82	33	D-1	0	X			06/17/82	42	D-2, R-2	0	X	
	05/20/82	34		0	X			06/24/82	51	D-2	1	X	
	05/27/82	40	D-1, R-2	0	X	LODGING		07/01/82	61			X	
	06/01/82	41	R-3	0	X			07/08/82				X	
	06/10/82	41	D-2, R-2	0	X	RUST	W7	05/07/82	33	D-1	2	X	
	06/17/82	42	D-2, R-2	0	X	RUST		05/20/82	34	D-1	2	X	
	06/24/82	50	R-2, W-3	0	X			06/01/82	40	D-1	3	X	
	07/01/82	61						06/03/82	41	D-1	2	X	
	07/08/82							06/10/82	42	R-1, D-1	2	X	
	05/07/82	32	D-1	0	X	STANDING WATER	W8	06/24/82	42	D-1	3	X	
W3	05/20/82	34	R-1	0	X	STUNTED GROWTH		07/01/82	51	D-1	3	X	
	05/27/82							07/08/82				X	
	06/01/82	41	R-2	0	X			05/07/82				X	
	06/03/82	41	0	0	X			05/20/82	33	0	0	X	
	06/10/82	41	W-1	0	X			06/03/82	41	0	0	X	
	06/17/82	42	W-2, R-2, D-2	0	X	RUST		06/10/82	42	D-2, R-2, W-1	0	X	
	06/24/82	42	0	2	X			06/17/82	42	D-1, R-1	0	X	RUST LEAVES ARE DRY
	07/01/82	51	0	2	X			06/24/82	42	0	1	X	
	07/08/82	61						07/01/82	52	0	1	X	
	05/07/82	33	D-1	0	X	FIELD FLOODED	W9	07/08/82	61			X	
W4	05/20/82	41	R-3	0	X	STANDING WATER		05/07/82	33	0	2	X	
	06/01/82	41				CHLOROTIC		05/20/82	34	D-1	3	X	
	06/10/82	41	R-3, W-2	0	X	STANDING WATER		05/27/82	40	0	3	X	
	06/17/82	42	R-3, D-2	1	X	DEAD AREAS		06/01/82	41	R-1	3	X	CHLOROTIC
	06/24/82	51	R-3	0	X	STANDING WATER		06/03/82	42	R-2	3	X	
	07/01/82	52	R-2	2	X	LODGING		06/10/82	43	R-3	3	X	HEADS BENT NO LEAVES MANY DEAD PLANTS
	07/08/82	52				STANDING WATER		06/17/82				X	
	05/07/82	32	D-1	0	X			06/24/82	50	R-3	3	X	
	05/20/82	34	R-1	0	X			07/01/82	53	D-2, R-3	3	X	
	06/01/82	40	R-3	0	X	SOME DEAD HEADS	W10	07/08/82	61			X	

III.f-1

III.f-2

FIELD DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS	FIELD DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS
05/20/82	32	D-1	1	X		09/07/82	50	1-1	2	X	
05/27/82	34	D-1	0	X	CHLOROTIC, SPARSE	09/23/82	53	1-1	3	X	
06/01/82	40	D-1	0			09/30/82	53	1-1	3	X	
06/03/82	41	D-2	0	X	RUST	10/12/82	62			X	
06/10/82	42	D-2	0	X		05/20/82	22	0	0	X	
06/17/82	42	D-2	1	X		05/27/82	22	0	0	X	LEAVES TORN
06/24/82	42	R-2	1	X		06/01/82	22	R-1	0	X	
07/01/82	53	0	2	X		06/03/82	22	0	0	X	
07/08/82	61			X		06/10/82	22	W-1	0	X	
05/07/82	22	I-1	0	X		06/17/82	23	0	0	X	
05/20/82	22	0	0	X		06/24/82	24	0	0	X	
05/27/82	22	0	0	X		07/01/82	24	0	0	X	
06/03/82	22	0	0	X		07/08/82	33	0	2	X	
06/10/82	22	R-2, W-2	0	X	SHREDDED LEAVES	07/15/82	41	0	2	X	
06/17/82	23	R-2, W-2	0	X	SHREDDED LEAVES	07/16/82				X	
06/24/82	24	R-3, W-1	0	X	PLANT HEIGHTS VARY	07/23/82				X	
07/01/82	24	R-1	0	X	STUNTED GROWTH	07/27/82	42	0	2	X	
07/08/82	31	0	0	X		08/03/82	42	0	1	X	
07/15/82	33	0	0	X		08/10/82	44	0	1	X	LEAVES TURNING BROWN
07/16/82				X		08/24/82	50	0	1	X	COBS DROOPING
07/29/82	42	0	0	X		09/02/82	63			X	HARVESTED APPROX 50 FEET FROM ROAD
07/30/82	42	0	0	X						X	
08/03/82	44	I-1	0	X	TASSELS DRYING	05/20/82	22	0	0	X	
08/10/82	50	I-1	0	X		05/27/82	22	R-1	0	X	
08/24/82	50	I-1	0	X		06/01/82	22	R-2	0	X	
09/02/82	50	0	0	X		06/03/82	23		0	X	BACK CENTER FIELD STANDING WATER
09/07/82	50	0	0	X						X	
09/16/82	63			X		06/10/82	23	0	0	X	
05/07/82	21	0	0	X		06/17/82	23	R-2	0	X	
05/20/82	22	0	0	X		06/24/82	31	0	0	X	
05/27/82	22	R-3	0	X	SWAMPY, STUNTED GROWTH	07/01/82	31	0	0	X	OUTER ROWS TASSELS AND SILKS
06/03/82	22			X						X	
06/10/82	22	R-3, W-2	0	X	SHREDDED LEAVES	07/08/82	41	0	0	X	
06/17/82	23	W-2, R-3	0	X	STUNTED GROWTH	07/15/82	42	0	0	X	
06/24/82	23	R-3, W-1	1	X		07/16/82				X	
07/01/82	23	0	1	X		07/27/82	43	0	0	X	
07/08/82	31	0	1	X	VARIABLE GROWTH	08/03/82	44	0	0	X	LEAVES TURNING BROWN
07/15/82	33	0	1	X						X	COBS DROOPING
07/29/82	42	0	2	X		08/10/82	44	0	0	X	HARVESTED 8/20
07/30/82	42	0	2	X		08/24/82	61	0	0	X	TILLED
08/03/82	42	0	2	X		09/07/82				X	
08/10/82	44	I-1	2	X	LEAVES TURNING BROWN	05/20/82				X	
				X	COBS DROOPING	05/27/82	22	0	0	X	
08/24/82	50	I-1	2	X		06/01/82	23	R-1	0	X	
09/02/82	50	I-1	2	X		06/03/82	23	R-1	0	X	

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III. f-4

FIELD	DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS
C6	06/10/82	23	R-2	0	X	
	06/17/82	23	0	0	X	
	06/24/82	24	R-1	0	X	
	07/01/82	24	0	0	X	
	07/08/82	33	R-2	0	X	
	07/15/82	41	0	0	X	
	07/16/82				X	
	07/26/82	42	0	0	X	
	07/27/82	43	I-1	0	X	
	08/03/82	43	0	1	X	LOWER LEAVES DRY COBS DROOPING
	08/10/82	43	0	1	X	
	08/24/82	50	0		X	
	09/02/82	61			X	
	09/07/82				X	
	05/20/82	22	0	0	X	TILLED
C7	05/27/82	22	0	0	X	
	06/01/82	22	R-2	0	X	
	06/10/82	23	W-1, R-1	0	X	
	06/17/82	23	I-1	0	X	
	07/01/82	23	0	1	X	
	07/08/82	32	0	1	X	
	07/15/82	33	0		X	
	07/23/82	41	0	1	X	
	07/27/82	41	0	2	X	
	08/03/82	44	0	1	X	
	08/24/82	50	0	1	X	
	09/07/82	50	0	1	X	
	09/16/82	53	0	0	X	
	05/20/82	22	0	0	X	HERBICIDE USED DEAD WEEDS LEAVES TORN LEAVES TORN
	05/27/82	22			X	
C8	06/01/82	22	R-2	0	X	
	06/03/82	22	0	1	X	
	06/10/82	22	0	1	X	
	06/17/82	23	0	0	X	
	06/24/82	24	0	0	X	
	07/01/82	24	0	1	X	
	07/08/82	33	0	1	X	
	07/15/82	33	0	1	X	
	07/16/82				X	
	07/26/82	42	0	0	X	
	07/29/82	42	0	0	X	
	08/03/82	44	I-1	1	X	
	08/10/82	44	I-2	1	X	
	08/24/82	44	I-2	2	X	
	09/02/82	44	I-1	1	X	
C9	09/07/82	50			X	TILLED
	09/16/82	63			X	
	05/20/82	22	0	0	X	CENTER FIELD STUNTED GROWTH
	05/27/82	22			X	
	06/01/82	22	R-1	0	X	
	06/03/82	22	R-2	1	X	
	06/17/82	23	W-2	0	X	
	06/24/82	24	0	0	X	
	07/01/82	24	R-1	1	X	
	07/08/82	32	0	1	X	
	07/15/82	33	0	3	X	
	07/16/82				X	
	07/29/82	42	0	2	X	
	08/03/82	42	0	2	X	
	08/24/82	44	0	1	X	
C10	09/02/82	63	0	2	X	
	09/07/82				X	
	05/20/82				X	
	06/01/82	22			X	
	06/03/82	22			X	
	06/17/82	23			X	
	06/24/82	24			X	
	07/01/82	24			X	
	07/08/82	32			X	
	07/15/82	33			X	
	07/16/82				X	
	07/29/82	42			X	
	08/03/82	42			X	
	08/24/82	44			X	
	09/02/82	63			X	

FIELD	DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS	FIELD	DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS
S1	05/27/82	22	0	0	X			07/23/82	41	0	0	X	
	06/01/82	22	R-1	0		LEAVES TORN		07/27/82	41	0	0	X	STILL FLOWERING
	06/03/82	22	R-1	0		LARGE BARE AREA		07/30/82	41	0	0	X	
	06/10/82	22	W-1	1	X			08/03/82	41	I-1	0	X	
	06/17/82	23	0	1	X			08/10/82			0	X	
	06/24/82	24	0	2	X			08/11/82	43	I-1	0	X	BOTTOM LEAVES YELLOW
	07/01/82	25	0	1	X			08/24/82	44	I-1	0	X	
	07/08/82	33	0	1	X			09/02/82	44	I-1	0	X	
	07/15/82	41	0	1	X	FIELD DROPPED FORM OBSERVATION		09/07/82	50	I-1	0	X	
	07/16/82					WHEAT STUBBLE		09/16/82	52	I-1	0	X	
	07/08/82	12	0	0	X			09/23/82				X	
	07/15/82	21	0	0	X			09/30/82	52	I-1	0	X	
	07/16/82				X	UNEVEN PLANT SPACING		10/12/82	52	0	0	X	
	07/29/82	23	I-1	0	X		S4	06/10/82	12	I-2	0		
	07/30/82	23	I-1	0	X	BARE AREA		06/24/82	12	0	0		
S2	08/03/82	23	I-2	0	X			07/01/82	22	0	0	X	TILLED RECENTLY
	08/10/82	30	I-2	0	X			07/08/82	23	0	0	X	
	08/24/82	41	I-1	1	X			07/15/82	30	I-1	0	X	
	09/02/82	41	I-1	2	X			07/16/82				X	
	09/07/82	43	I-1	3	X			07/23/82				X	
	09/16/82				X			07/27/82	32	I-1	0	X	
	09/23/82	44	I-1	1	X			07/30/82	32	I-1	1	X	
	09/30/82	44	I-1	1	X			08/03/82	41	I-1	0	X	
	10/12/82	52	I-1	1	X			08/11/82	43	I-1	2	X	
	10/19/82	52	I-1	1	X			08/24/82	44	I-1	1	X	
	07/15/82	12	0	0	X	WHEAT STUBBLE		09/02/82	44	I-1	1	X	
	07/16/82				X			09/07/82	50	I-1	2	X	
	07/23/82				X			09/16/82	50	I-1	0	X	
	07/27/82	22	0		X			09/23/82				X	
	08/03/82	23	I-1	0	X	UNEVEN PLANT SPACING		09/30/82	52	0	0	X	
S3	08/10/82				X			10/12/82	52	0	0	X	
	08/11/82	31	I-1	1	X			10/19/82	61			X	
	08/24/82	40	I-1	2	X			06/10/82	22	I-2	0	X	TILLED TODAY
	09/02/82	42	I-1	3	X			06/17/82	22	I-2	0	X	
	09/07/82	43	I-1	3	X			06/24/82	23	I-2	0	X	
	09/23/82				X			07/01/82	23	I-1	0	X	RECENTLY TILLED
	09/30/82	50	I-1	3	X			07/08/82	23	0	0	X	
	10/12/82	52	I-1	3	X			07/15/82	32	I-1	0	X	
	10/19/82	52	I-1	3	X			07/16/82				X	
	06/10/82	21	I-2	0	X			07/23/82				X	
	06/17/82	22	0	0	X			07/27/82	41	0	0	X	STILL FLOWERING
	06/24/82	23	0	0	X			08/03/82	41	I-1	0	X	
	07/01/82	23	I-1	0	X			08/11/82	43	I-1	0	X	
	07/08/82	23	0	0	X	TILLED RECENTLY		08/24/82	44	I-1	0	X	
	07/15/82	32	0	0	X			09/07/82	51	I-1	0	X	
	07/16/82				X			09/16/82	51	I-1	0	X	

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III f-7

FIELD	DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS	FIELD	DATE	PHYSIOLOGICAL GROWTH STAGE	CROP DAMAGE	WEEDINESS	COLOR SLIDES	COMMENTS
S6	09/30/82	52	0	0	X		S10	08/11/82	32	I-2	2	X	
	10/12/82	52	0	1	X			08/24/82				X	
	06/10/82	22	I-2	0	X			09/07/82	43	I-1	2	X	
	06/17/82	22	I-1, R-1	0	X			09/16/82	44	I-1	2	X	
	06/24/82	23	I-1	0	X			09/30/82	51	I-1	2	X	
	07/01/82	23	I-1	0	X			10/12/82	51	I-1	2	X	
	07/08/82	23	0	0	X			10/19/82	52	0	0	X	
	07/15/82	32	I-1	0	X			06/10/82	21	I-2, R-1	0	X	STANDING WATER
	07/16/82				X			06/17/82	22	I-2	1	X	
	07/23/82	41	0	0	X	STILL FLOWERING		06/24/82	22	I-2	1	X	
S7	07/27/82	41	I-1	0	X		S7	07/01/82	23	I-2	1	X	BARE AREAS
	08/03/82	42	I-1	0	X			07/08/82	23	R-2	1	X	TILLED
	08/11/82	44	I-1	0	X			07/15/82	32	I-2	2		
	08/24/82	51	I-1	0	X			07/29/82	41	I-1	1		
	09/07/82	51	I-1	0	X			08/03/82	43	I-1	1	X	
	09/16/82	51	I-1	0	X			08/10/82	43	I-1	2	X	
	09/30/82	52	0	0	X	WHEAT STUBBLE		08/24/82	44	I-1	2	X	
	07/15/82	12	0	0	X			09/02/82	44	I-2	2	X	
	07/16/82				X			09/07/82	50	I-1	2	X	
	07/23/82	23	I-1	2	X			09/16/82	52	0	1	X	
S8	07/27/82	23	I-2	2	X		S8	09/23/82	52	0			
	08/03/82	23	I-2	2	X								
	08/11/82	23	I-2	3	X	HERBICIDE APPLIED							
	08/24/82	32	I-1	3	X								
	09/07/82	43	I-1	3	X								
	09/16/82	44	I-1	3	X								
	09/30/82	51	I-1	3	X								
	10/12/82	52	0	3	X								
	10/19/82	52	0	3	X	WHEAT STUBBLE							
	07/15/82	22	0	0	X								
S9	07/16/82				X		S9						
	07/23/82	23	I-1	0	X								
	07/27/82	30	I-1	2	X								
	08/03/82	32	I-1	0	X								
	08/11/82	32	I-1	0	X								
	08/24/82	42	I-1	0	X								
	09/07/82	50	I-1	0	X								
	09/16/82	50	I-1	0	X								
	09/30/82	51	I-1	0	X								
	10/12/82	52	0	0	X								
S9	10/19/82	52	0	0	X		S9						
	07/15/82	21	0	2	X	WHEAT STUBBLE							
	07/16/82				X								
	07/23/82	22	I-1	2	X								
S9	07/27/82	22	I-1	2	X	VARIED GROWTH STAGES	S9						
	08/03/82	23	I-2	2	X								

APPENDIX III.g

PARTICLE SIZE AND TEXTURAL CLASSIFICATION

III.g

APPENDIX III.g
Particle Size and Textural Classification
of the 0- to 5-cm Layer

Field	% Sand	% Silt	% Clay	Classification	*
W 1	39.7	44.2	16.1	Loam	(Ju)
2	39.7	44.2	16.1	Loam	(Ju)
3	32.4	56.0	11.6	Silty Loam	(Ju)
4	28.0	59.5	12.5	--	(Km)
5	--	--	--	--	(Ev)
6	10.1	61.4	27.8	Silty Clay Loam	(Ev)
7	--	--	--	--	(Ev)
8	60.9	29.5	9.6	Sandy Loam	(Ev)
9	--	--	--	--	(Km)
10	46.0	41.5	9.6	Sandy Loam	(Ew)
C 1	31.5	52.4	16.1	Silty Loam	(Kb)
2	15.0	68.5	16.5	Silty Loam	(Kb)
3	35.9	51.9	12.2	Silty Loam	(Ev)
4	24.1	51.1	24.8	Silty Loam	(Ev)
5	66.0	27.0	7.0	Sandy Loam	(Ev)
6	36.1	49.9	14.0	Loam	(Ev)
7	6.1	68.3	25.6	Silty Loam	(Km)
8	12.5	63.5	24.0	Silty Loam	(Km)
9	14.0	62.0	24.0	Silty Loam	(Ev)
10	15.0	71.0	14.0	Silty Loam	(Ju)
S 1	39.7	44.2	16.1	Loam	(Ju)
2	32.4	56.0	11.6	Silty Loam	(Ju)
3	33.0	64.0	3.0	Silty Loam	(Ev)
4	37.2	45.8	17.0	Loam	(Ev)
5	47.0	45.0	8.0	Loam	(Ev)
6	40.6	44.3	15.1	Loam	(Km)
7	16.0	60.0	24.0	Silty Loam	(Ev)
8	10.1	61.4	27.8	Silty Clay Loam	(Ev)
9	55.0	41.0	4.0	Sandy Loam	(Et)
10	30.4	40.9	28.7	Clayey Loam	(Km)

*Soil textural classifications in parentheses are based on Dickey et al. (1977). Codes are as follows:

Et: Eudora silt loam
Ev: Eudora-Kimo Complex
Ew: Eudora-Kimo fine sandy loam, overwash
Ju: Judson silt loam
Kb: Kennebec silt loam
Km: Kimo silt loam

APPENDIX III.h

FARM OPERATORS' REPORTS

III.h

Appendix III.h
Farm Operators' Reports

Field	Operator	Field Preparation	Planting Date	Seed Variety	Pesticide Type	Herbicide Type	Harvest Date	Yield Bu/Acre	Bu. Wt. Lbs.
W 1	Ross	Disc	10/11/81	Newton	None	None	6/29/82	32.3	58
W 2	Ross	Disc	10/11/81	Newton	None	None	6/29/82	32.3	58
W 3	Palmateer	Chisel and Field Cultivator	10/09/81	NK835	None	None	7/03/82	22	NA
W 4	Wise	Disc (twice)	10/05/81	Newton	None	None	7/08/82	23	47
W 5	Palmateer	Chisel and Field Cultivator	10/12/81	NK835	None	None	7/03/82	27	NA
W 6	Pine	Disc (twice)	10/05/81	Newton	None	None	6/26/82	31.2	NA
W 7	Palmateer	Chisel and Field Cultivator	10/12/81	NK535	None	None	7/03/82	21	NA
W 8	Palmateer	Chisel and Field Cultivator	10/04/81	Pioneer S-78	None	None	7/06/82	31	NA
W 9	Palmateer	Chisel and Field Cultivator	10/15/81	Pioneer 70	None	None	7/07/82	20	NA
W10	Husted	Disked under soybean stubble	10/05/81	Newton	None	None	6/30/82	30	60

Appendix III.h (contd.)

Farm Operators' Reports

Field	Operator	Field Preparation	Planting Date	Seed Variety	Pesticide Used	Herbicide Used	Harvest Date	Bu/Acre	Bu. Wt. Lbs.
C 1	Ross	Field Cultivator	4/14/82	Pioneer 3183	Thimet	Lasso Atrazine	9/29/82	154	55
C 2	Kitsmiller	Disc (twice)	4/27/82	Pioneer 3383	Dyfonate	Sutan Atrazine	8/14/82	78	NA
C 3	Ross	Field Cultivator	4/12/82	Cargill 967	Thimet	Lasso Atrazine Bladex	9/22/82	122	55
C 4	Ross	Field Cultivator	4/15/82	Cargill 967	Thimet	Lasso Atrazine	8/16- 27/82	Silage	--
C 5	Ross	Field Cultivator	4/15/82	Pioneer 3183	Thimet	Lasso Atrazine	8/16- 27/82	Silage	--
C 6	Palmateer	Field Cultivator	4/11/82	NK PX83	Thimet	Lasso Atrazine	9/17/82	131	NA
C 7	Ross	Field Cultivator	4/13/82	Cargill 921	None	Lasso Atrazine	9/07/82	93	55
C 8	Pine	Disc and Field Cultivator	4/10/82	Cargill 967	None Sutan	Atrex 9-0	9/07/82	115	NA
C 9	Pine	Disked, Plowed, Disked, Field Cultivator	5/09/82	Asgrow 3127	None	Treflax Sencore	9/28/82	NA	NA
C10	Husted	Disked under soybean stubble	4/16/82	Dekalb	None	Lasso	10/10/82	100	56

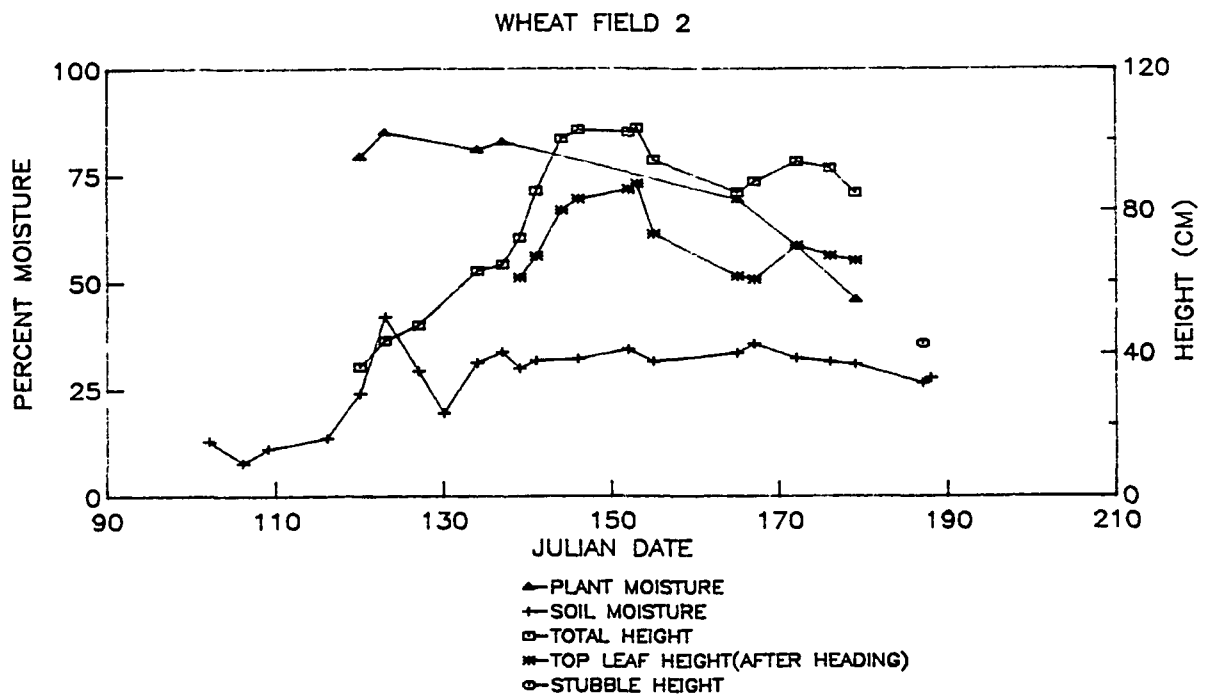
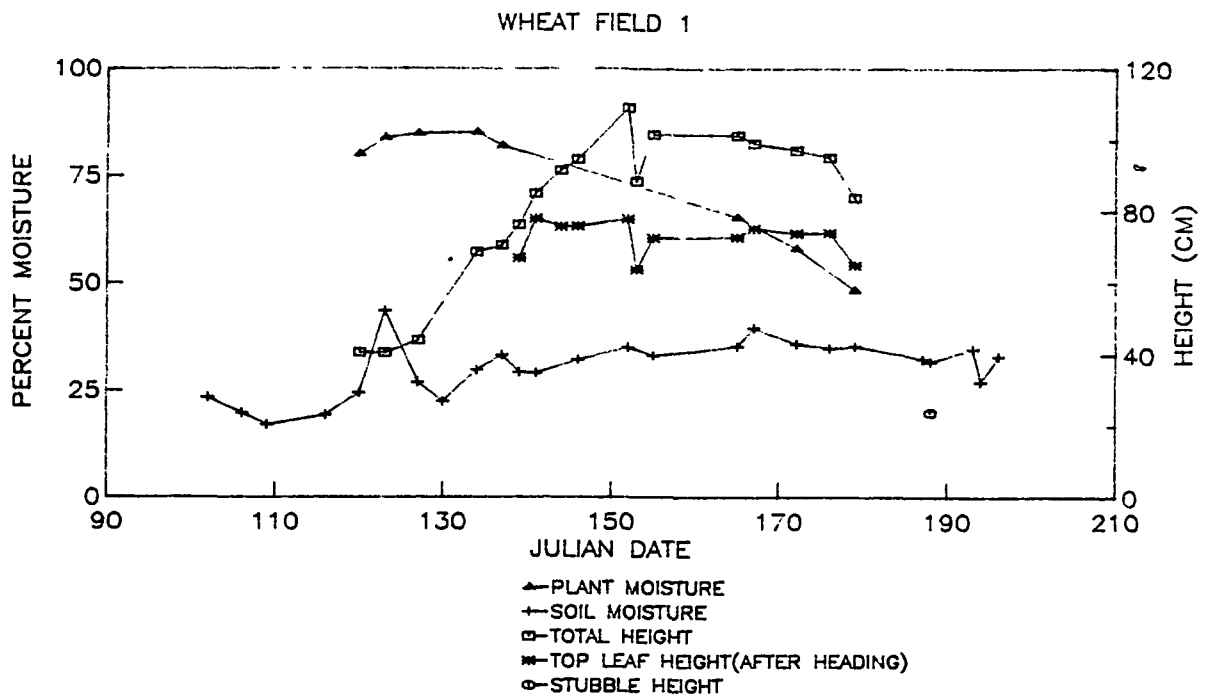
Appendix III.h (contd.)
Farm Operators' Reports

Field	Operator	Field Preparation	Planting Date	Seed Variety	Pesticide Used	Herbicide Used	Harvest Date	Bu/Acre	Bu. Wt. Lbs.
S 1	Ross	No Till	6/30/82	Williams 79	None	Lasso Lorox Paraquat	10/22/82	34	55
S 2	Palmateer	No Till	7/06/82	Williams 79	None	Lasso Modown	10/22/82	15	NA
S 3	Palmateer	Field Cultivator	5/24/82	Williams 79	None	Treflan	10/23/82	44	NA
S 4	Ross	Field Cultivator	6/08/82	DeSoto	None	Lasso Modown	10/14/82	52	55
S 5	Palmateer	Field Cultivator	5/22/82	Williams 79	None	Treflan	10/21/82	44	NA
S 6	Ross	Field Cultivator	5/20/82	Douglas	None	Lasso Modown	10/18/82	58	55
S 7	Palmateer	Field Cultivator	7/03/82	Williams 79	None	Lasso Modown	10/24/82	18	NA
S 8	Pine	No Till	6/25/82	Williams 79	None	Lasso Lorox Paraquat	10/23/82	39	NA
S 9	Palmateer	Field Cultivator	7/03/82	Williams 79	None	Lasso Modown	10/24/82	17	NA
S10	Pine	Disked, Ripped, Disked, Field Cultivator	5/05/82	Asgrow 3127	None	Treflan Lorox	10/10/82	44	NA

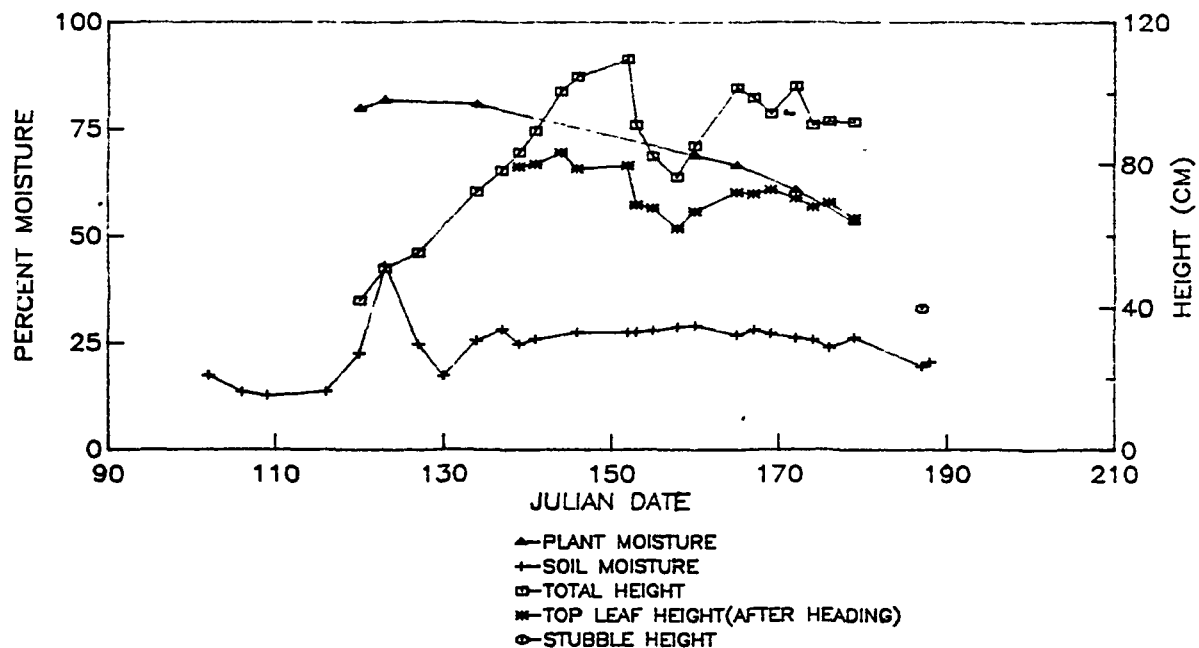
APPENDIX III.i

TIME HISTORY OF SELECTED TARGET CHARACTERISTICS
(PLOTS)

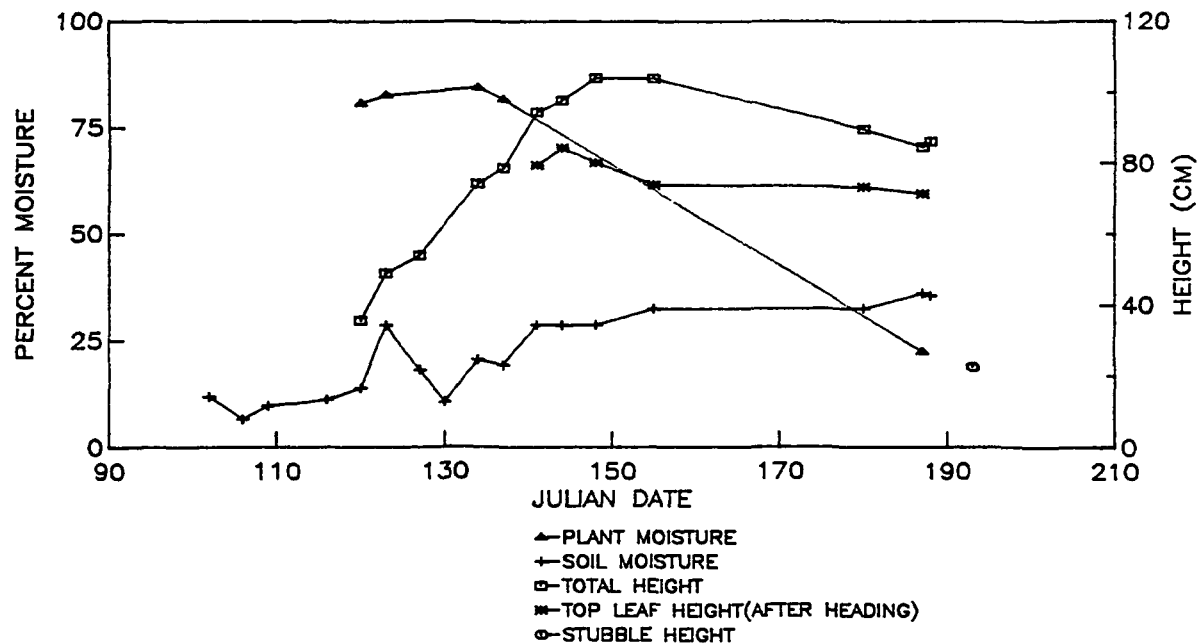
III.i

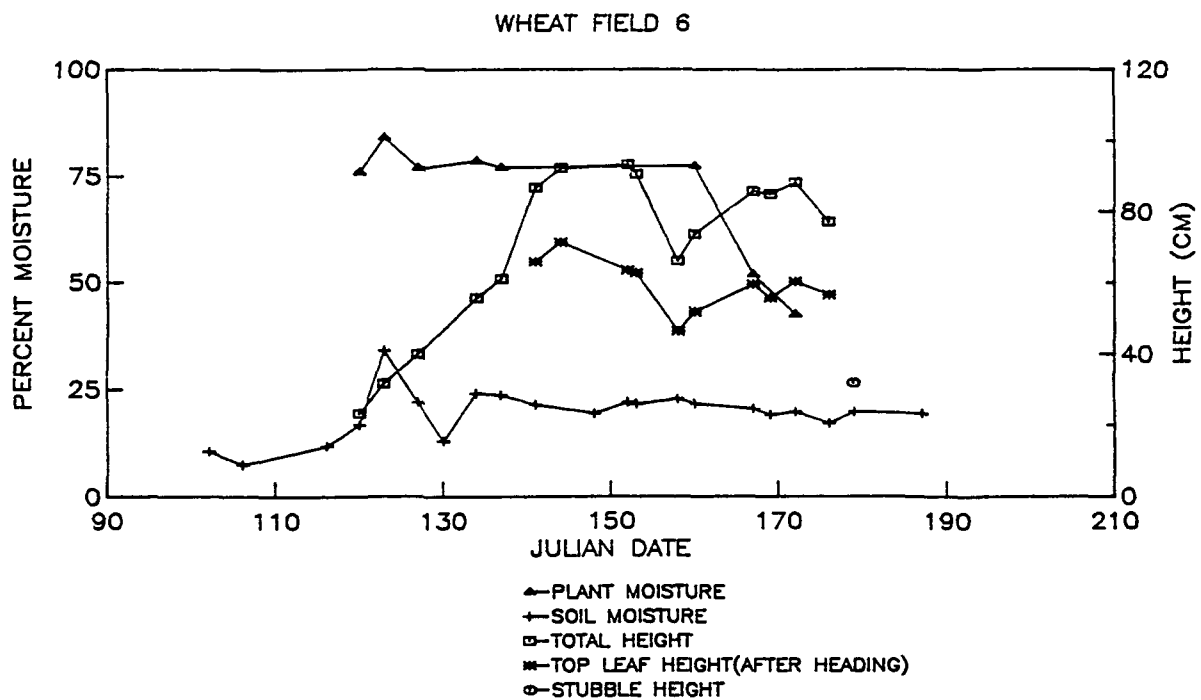
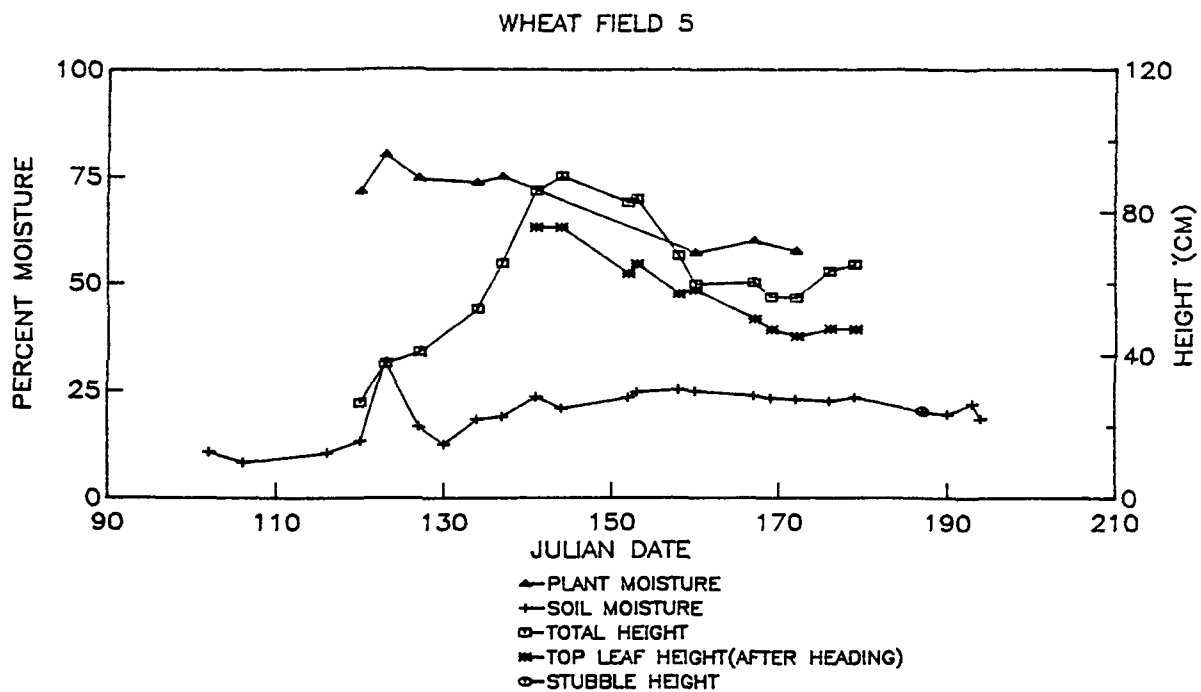


WHEAT FIELD 3

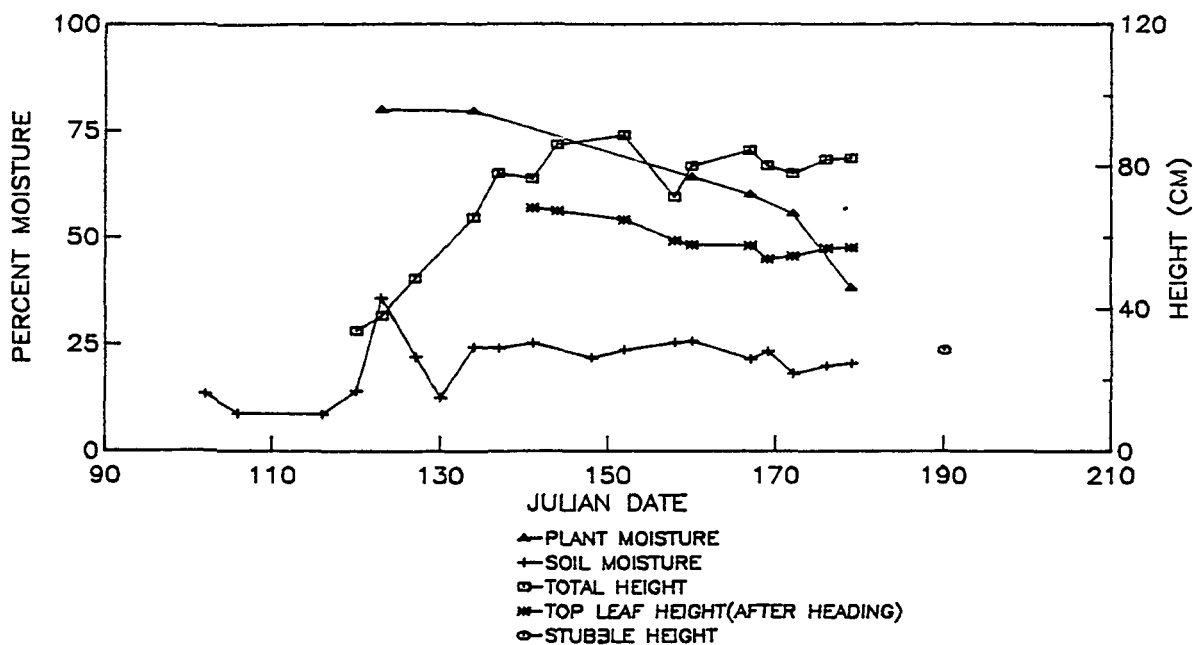


WHEAT FIELD 4

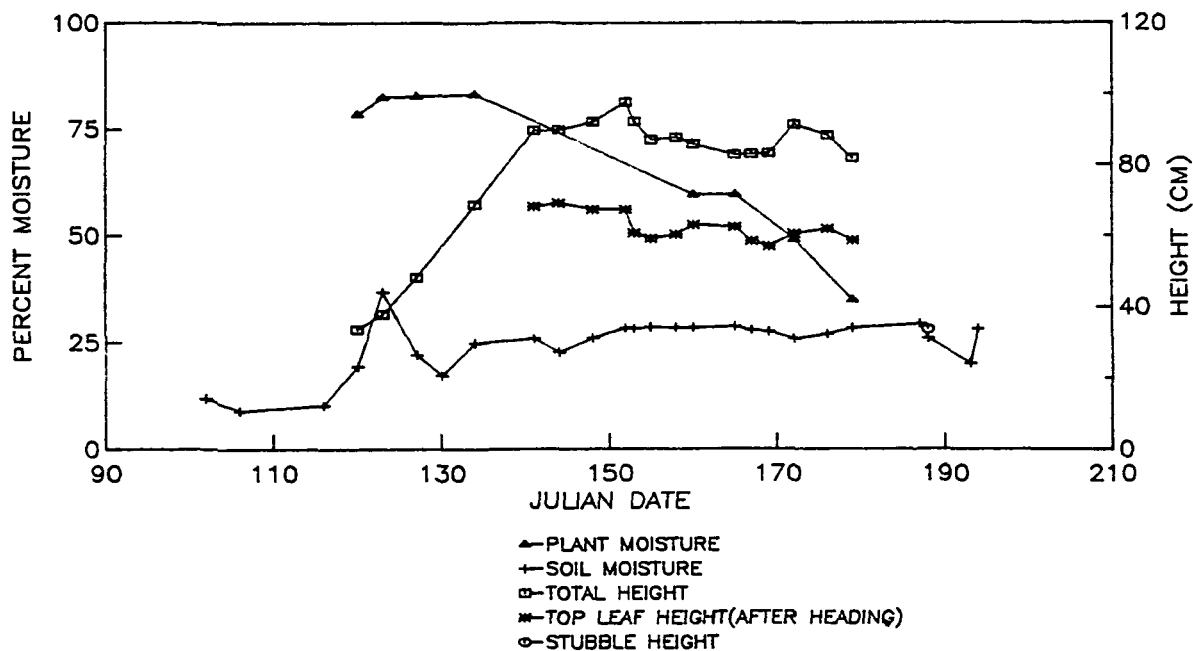




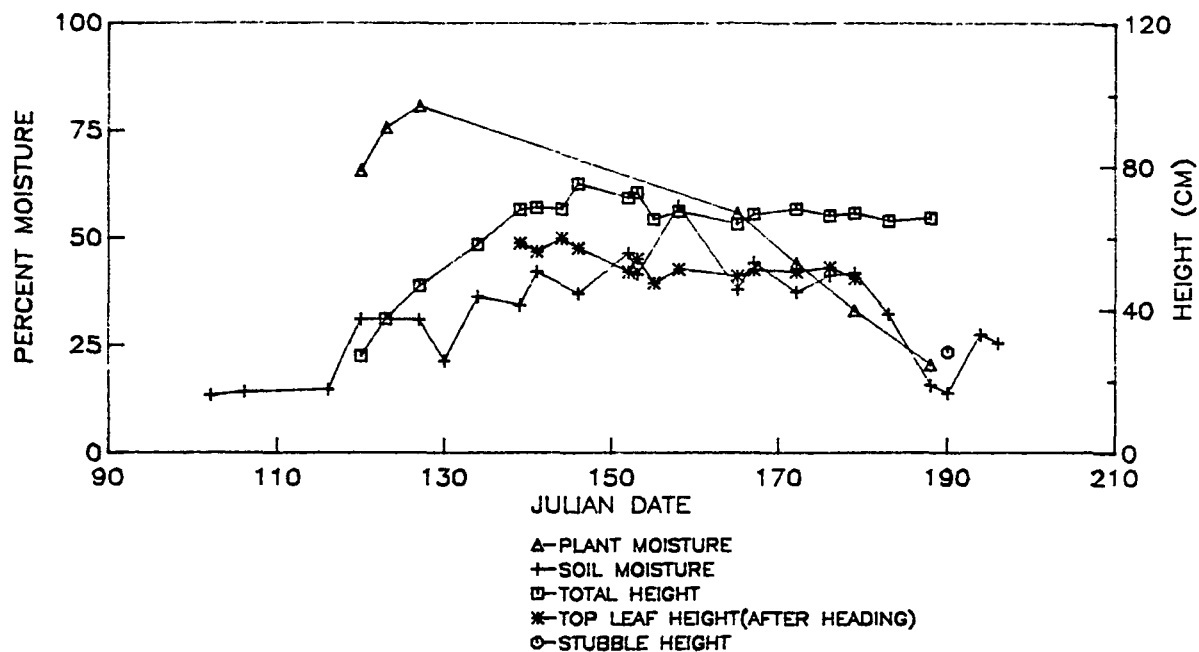
WHEAT FIELD 7



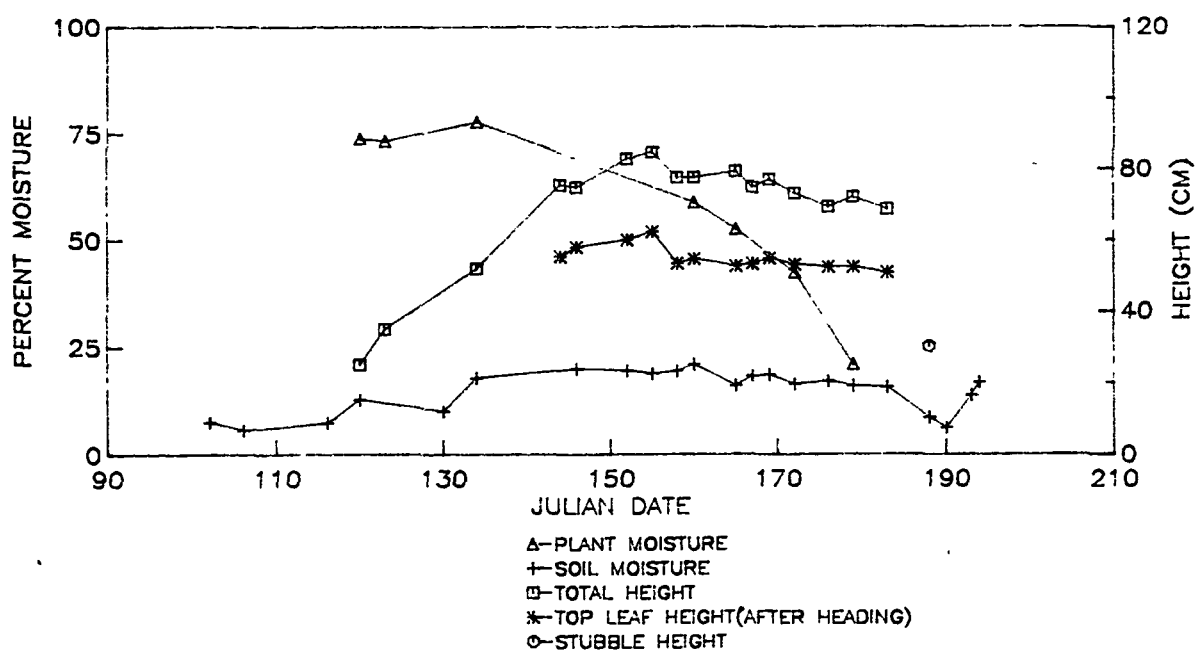
WHEAT FIELD 8



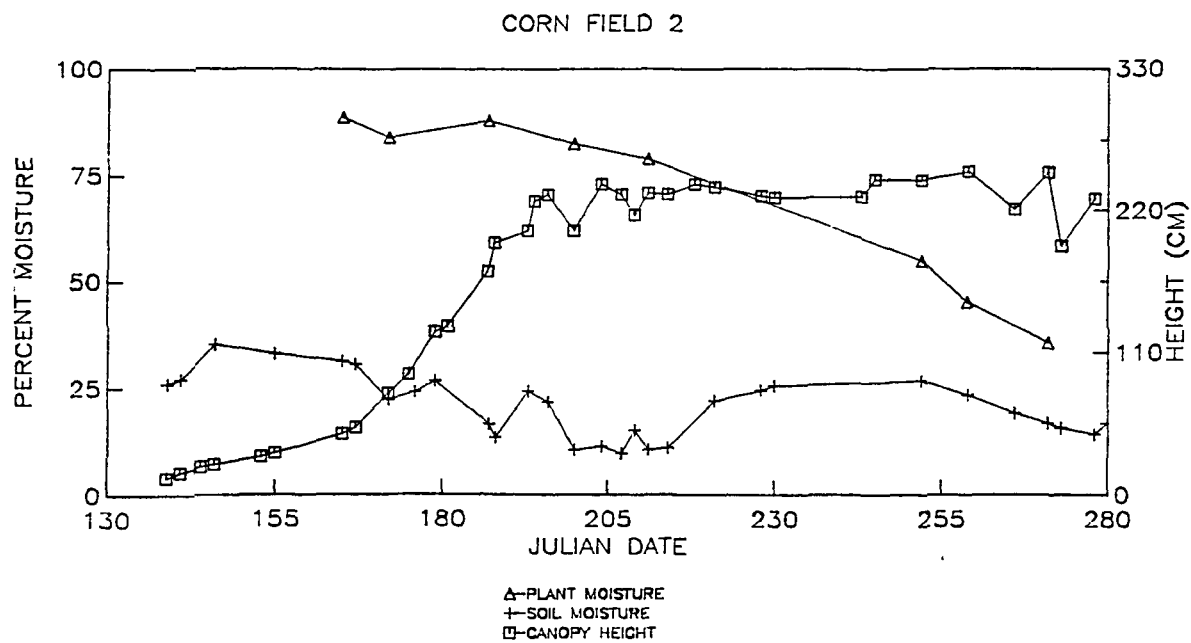
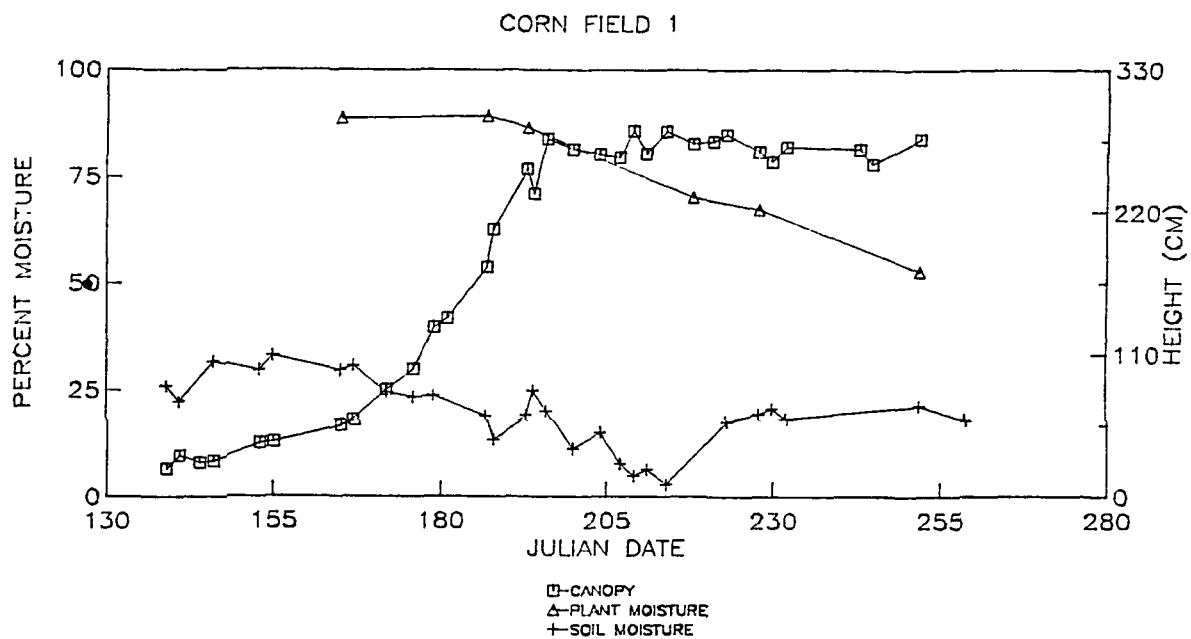
WHEAT FIELD 9



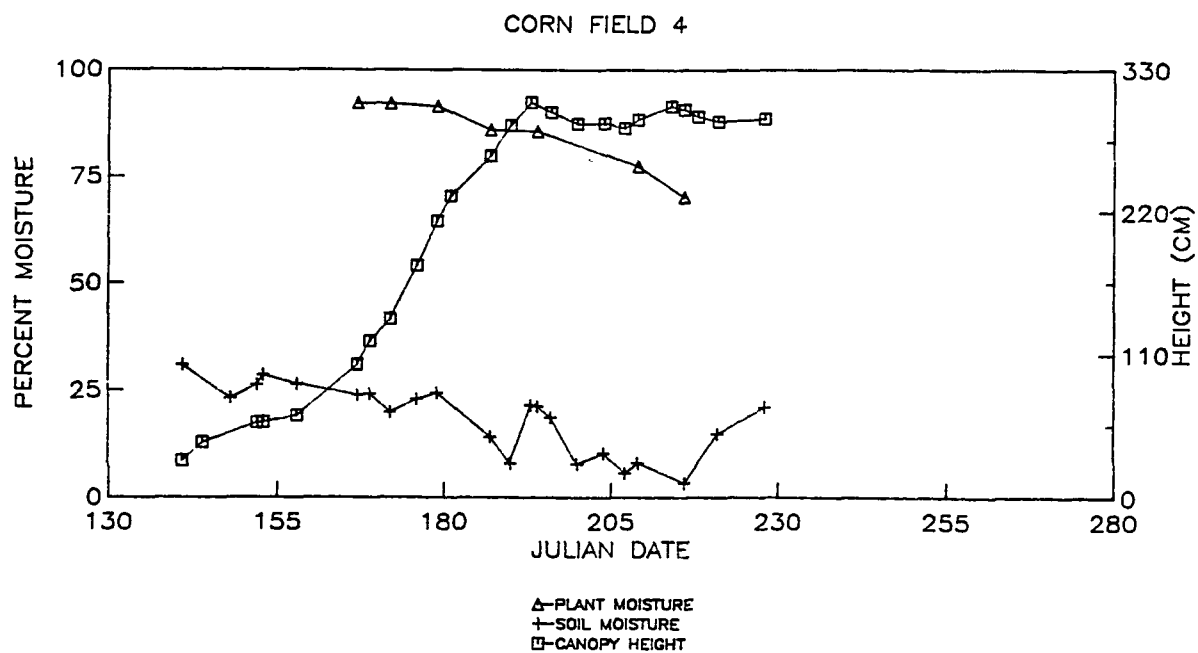
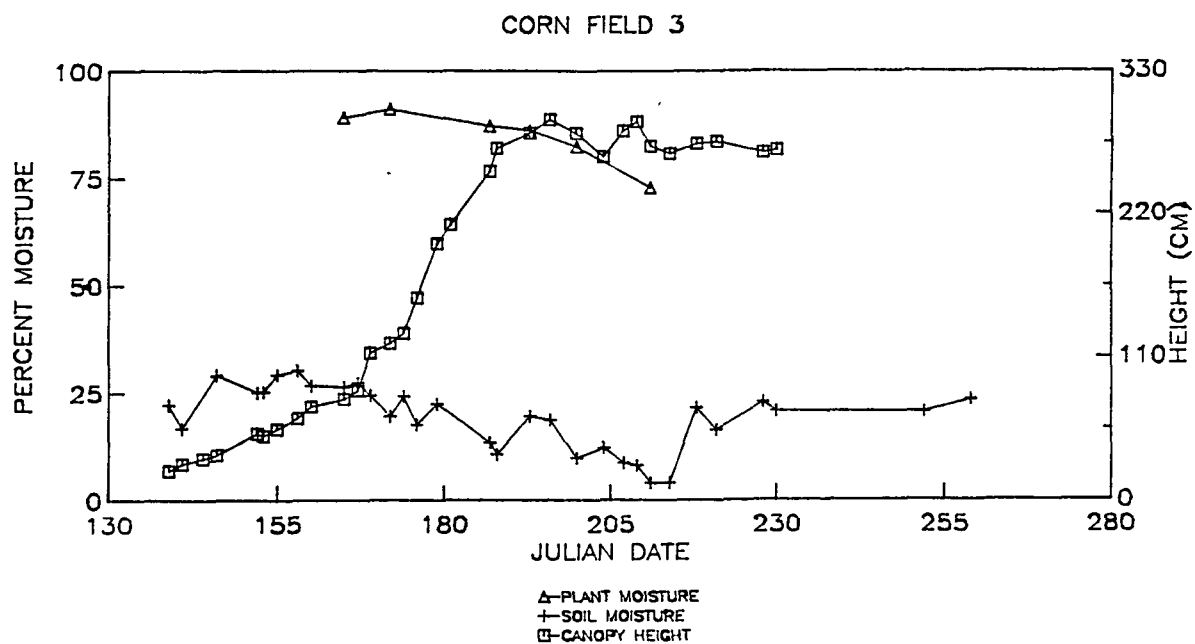
WHEAT FIELD 10



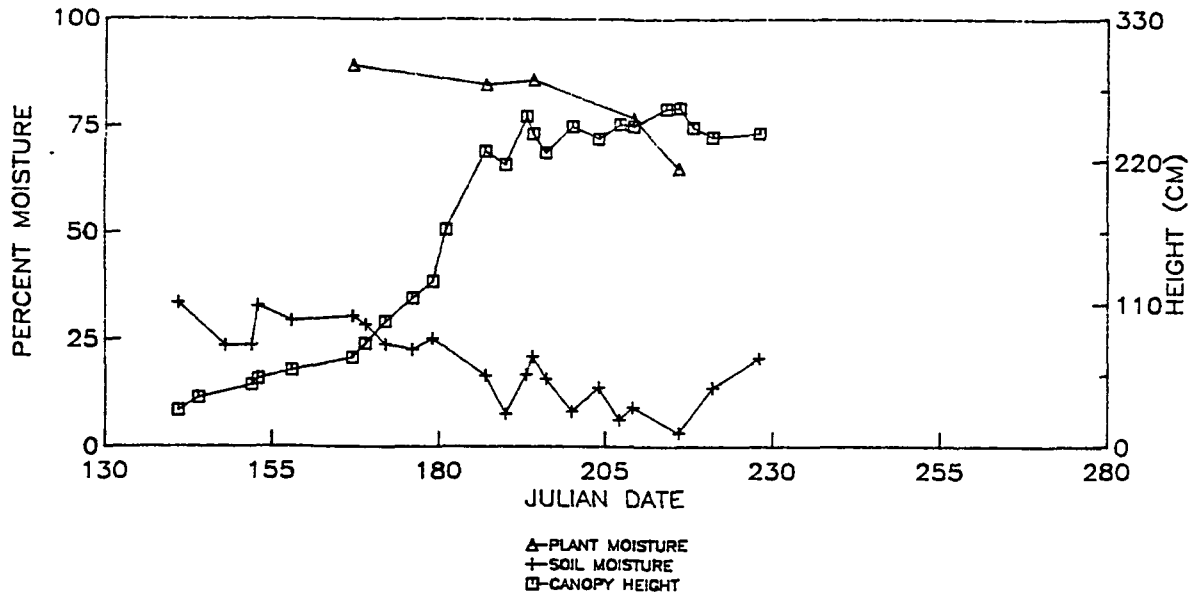
iii.i.5



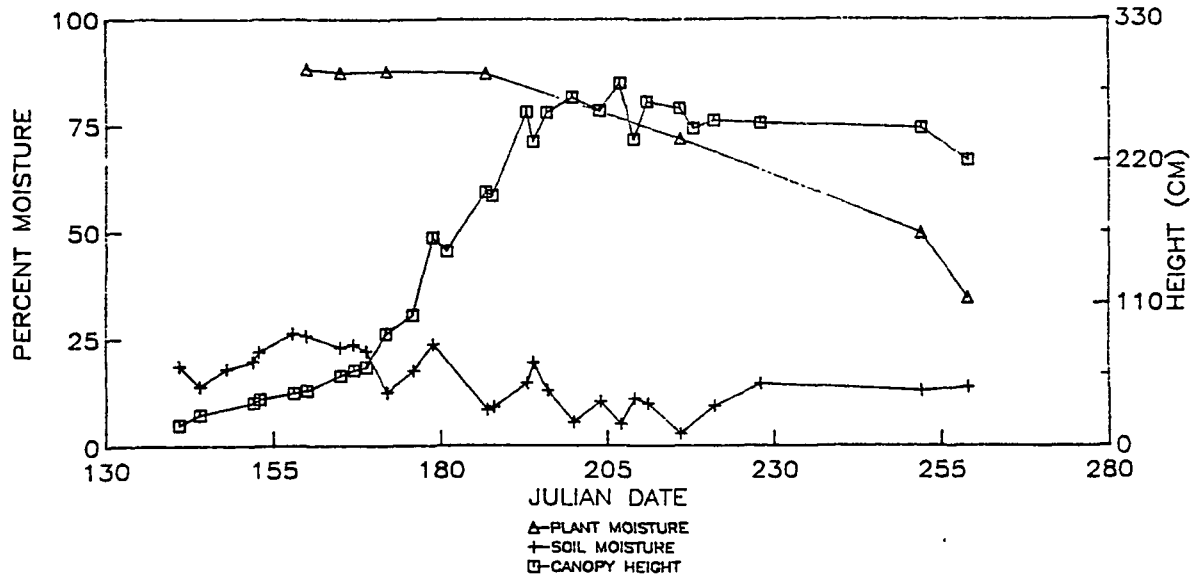
iii.i.6



CORN FIELD 5

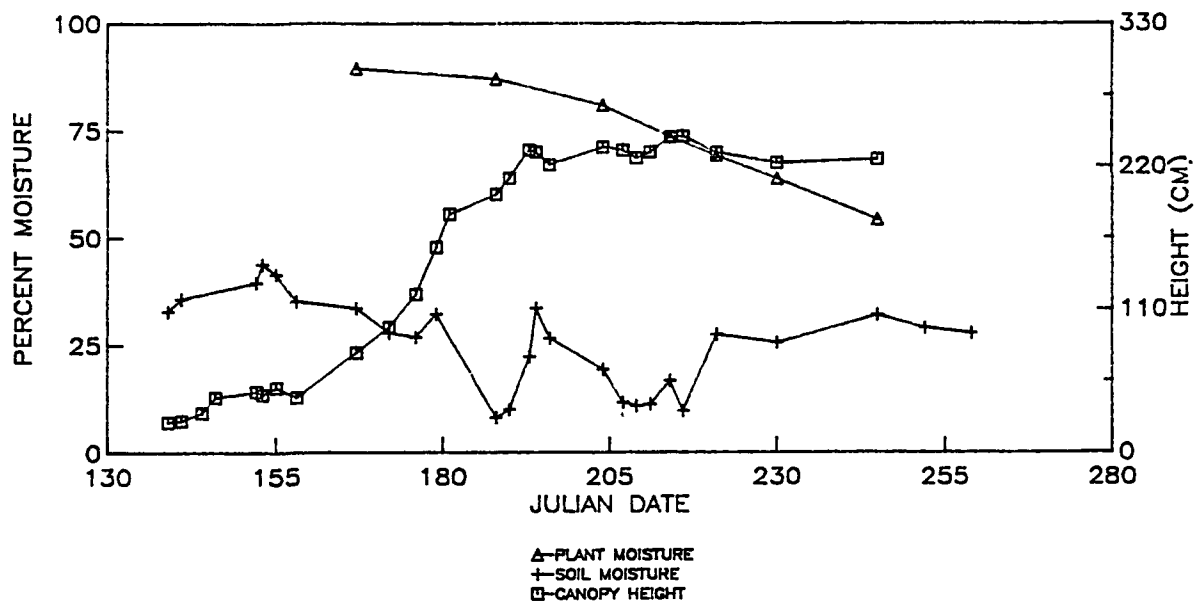


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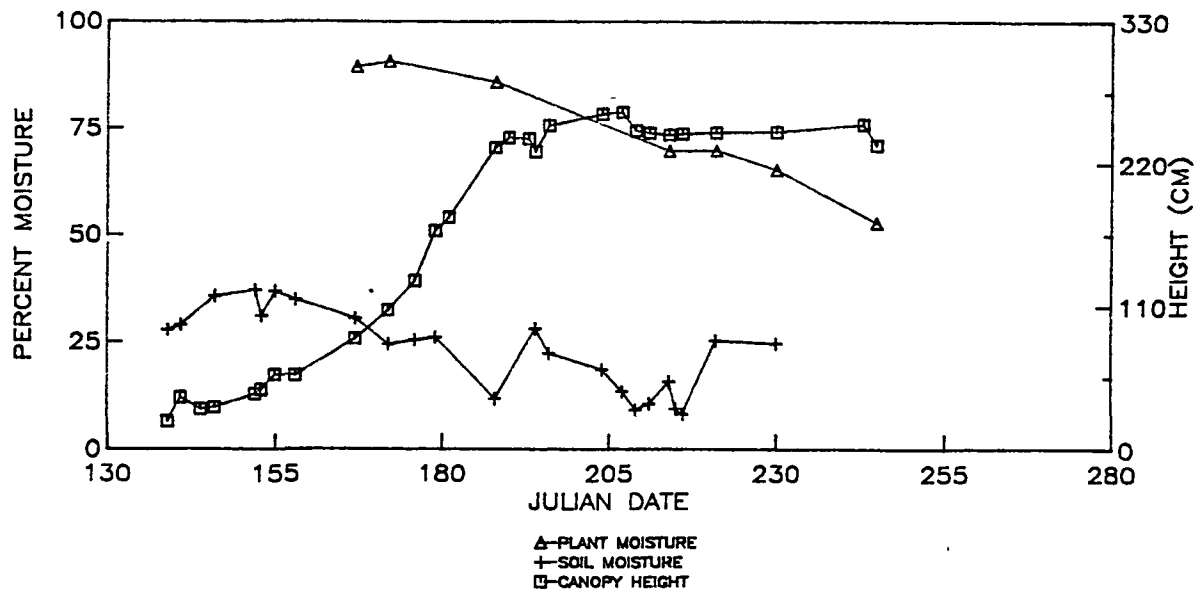


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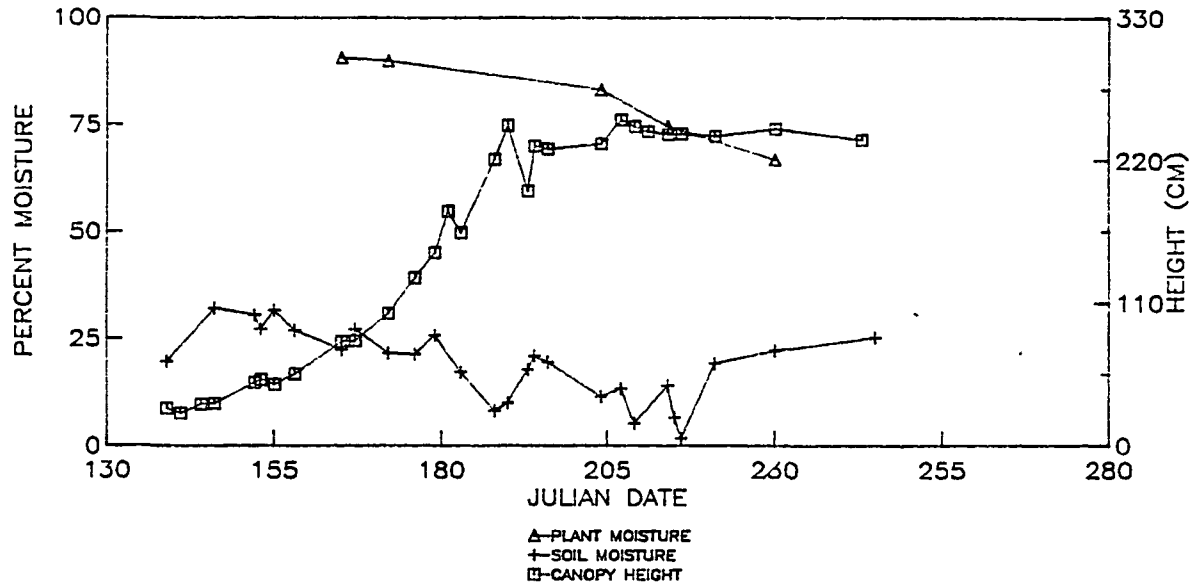
CORN FIELD 7



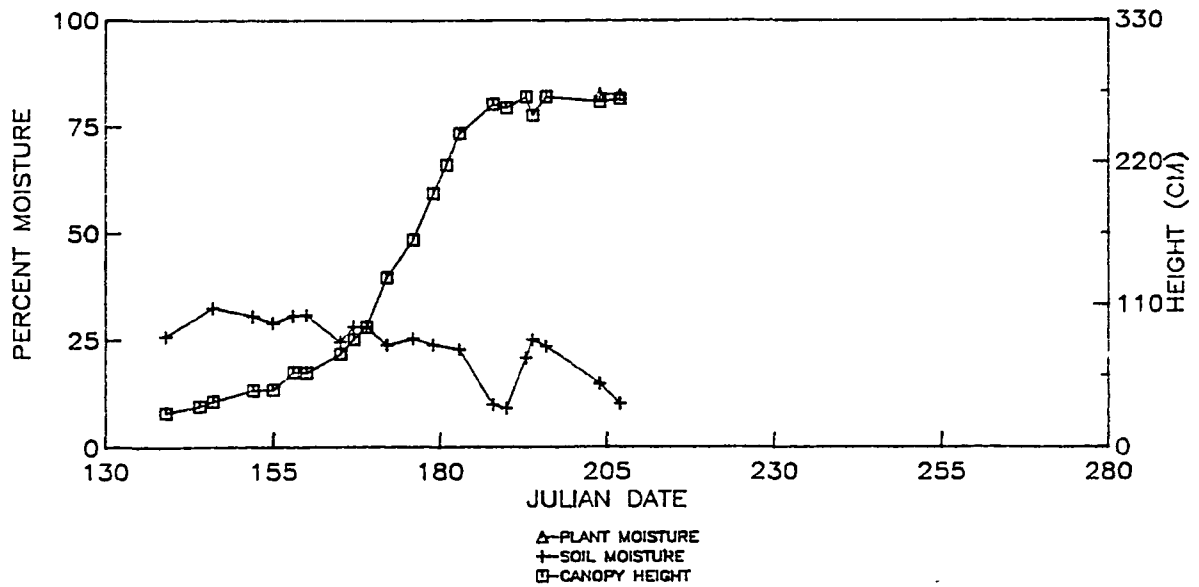
CORN FIELD 8



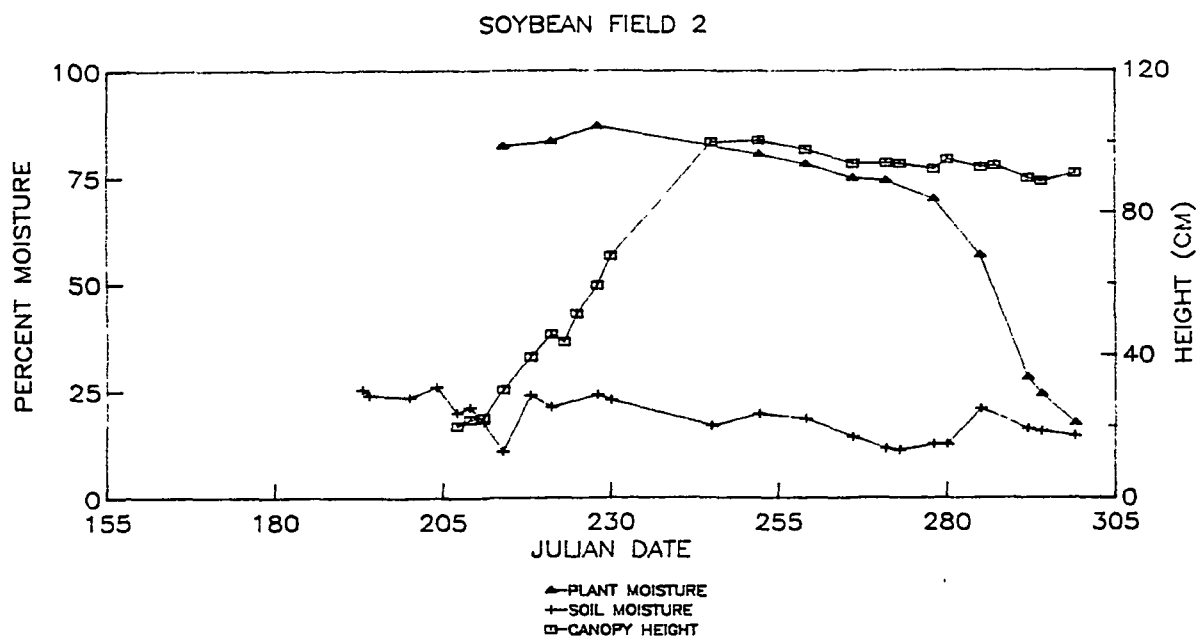
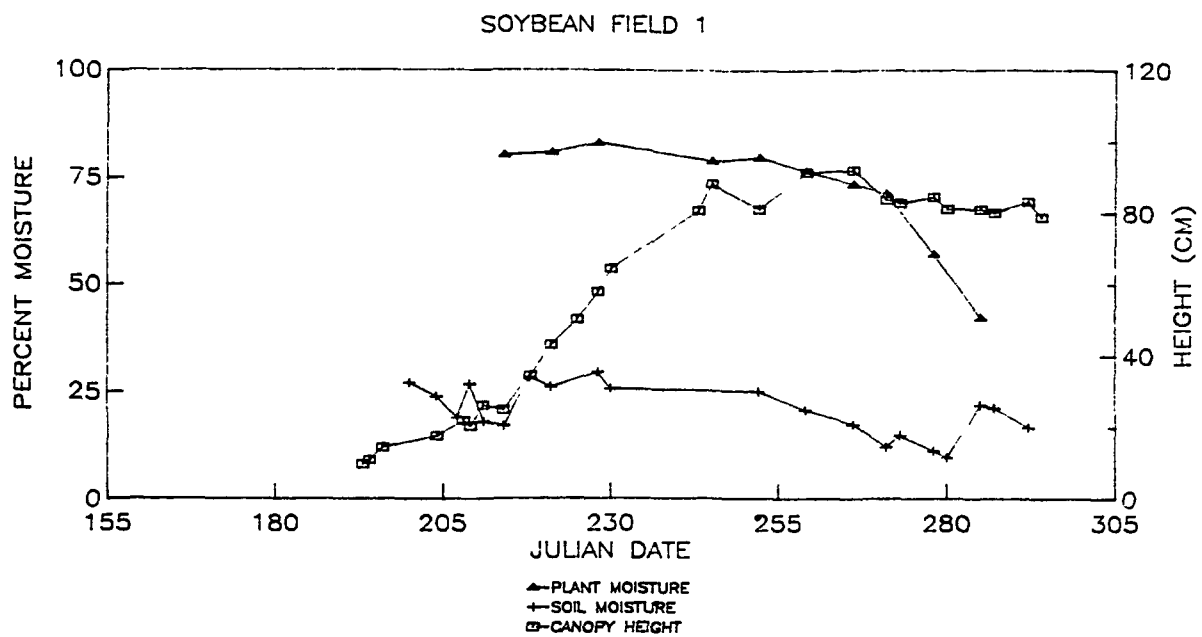
CORN FIELD 9



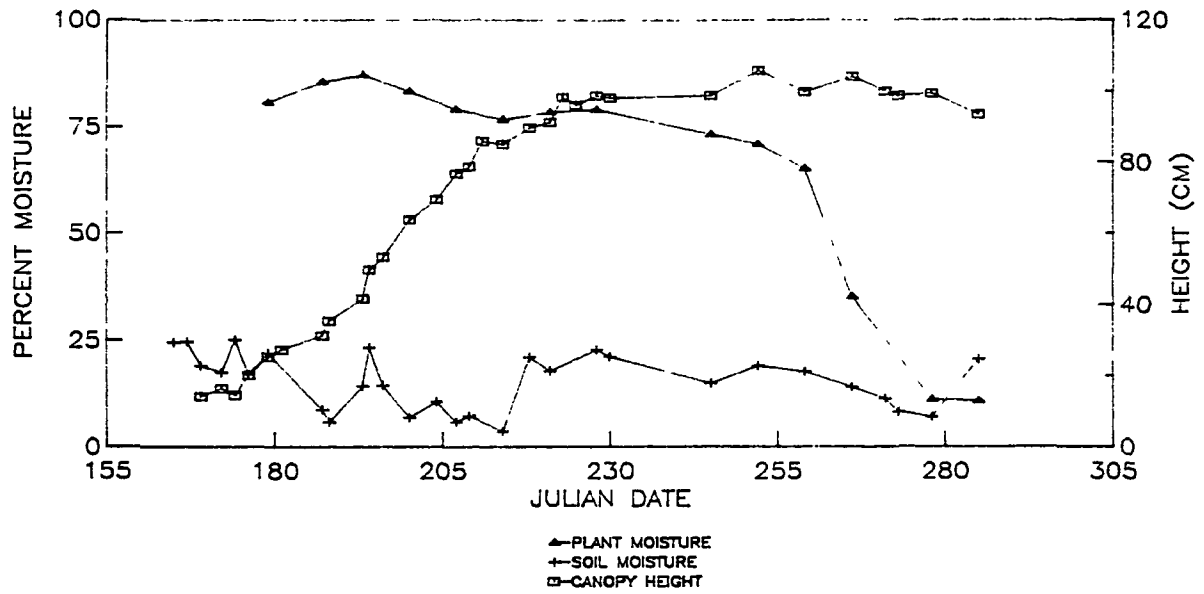
CORN FIELD 10



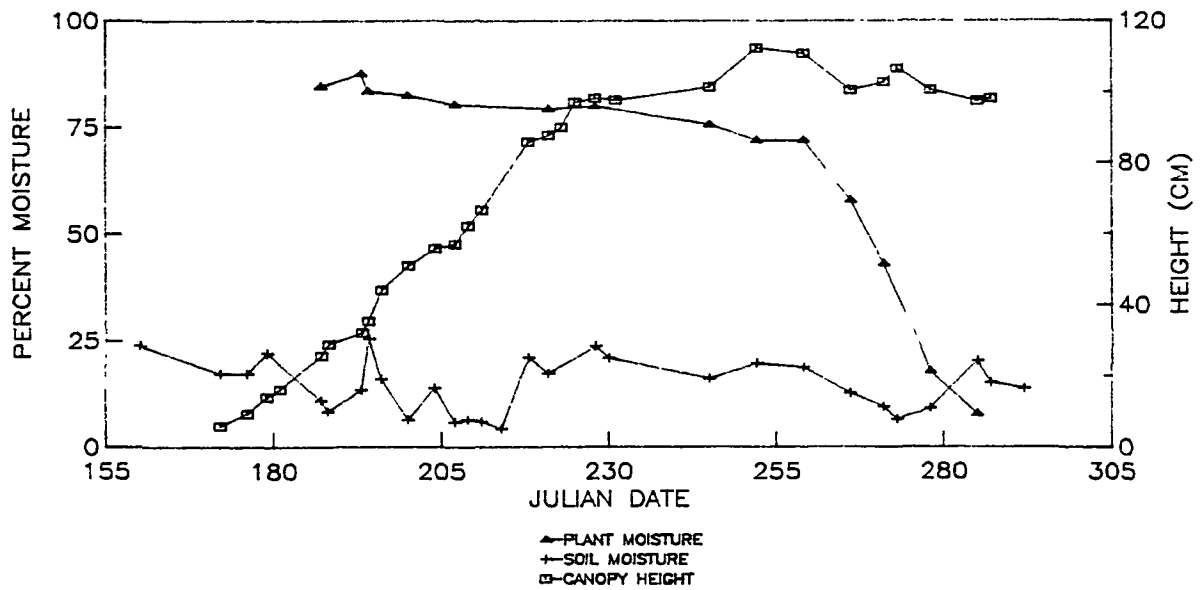
iii.i.10



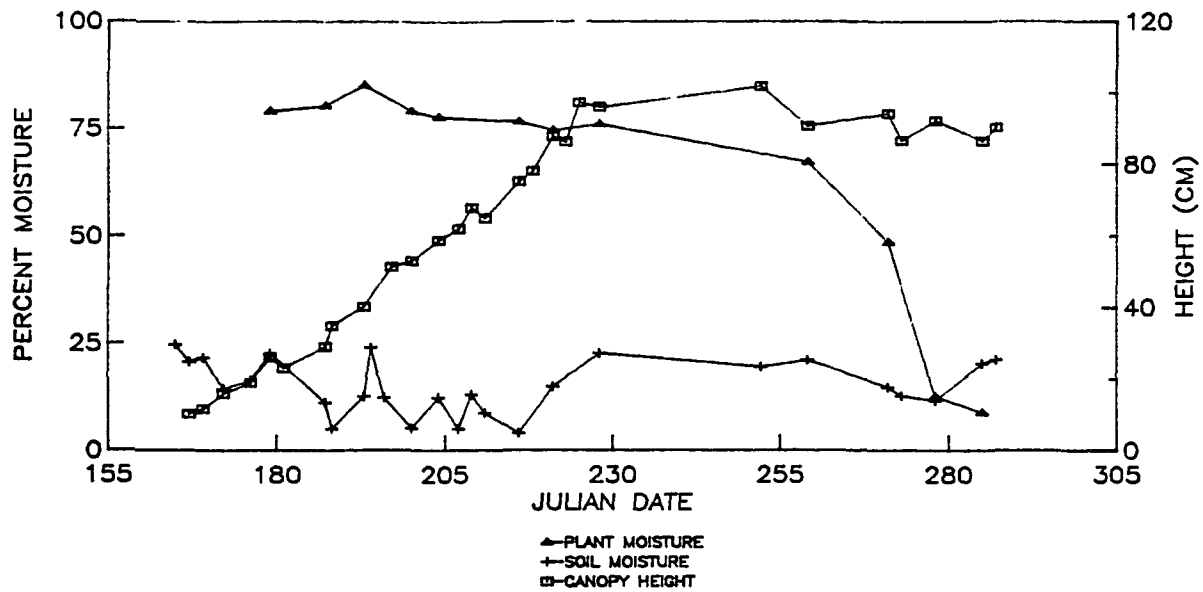
SOYBEAN FIELD 3



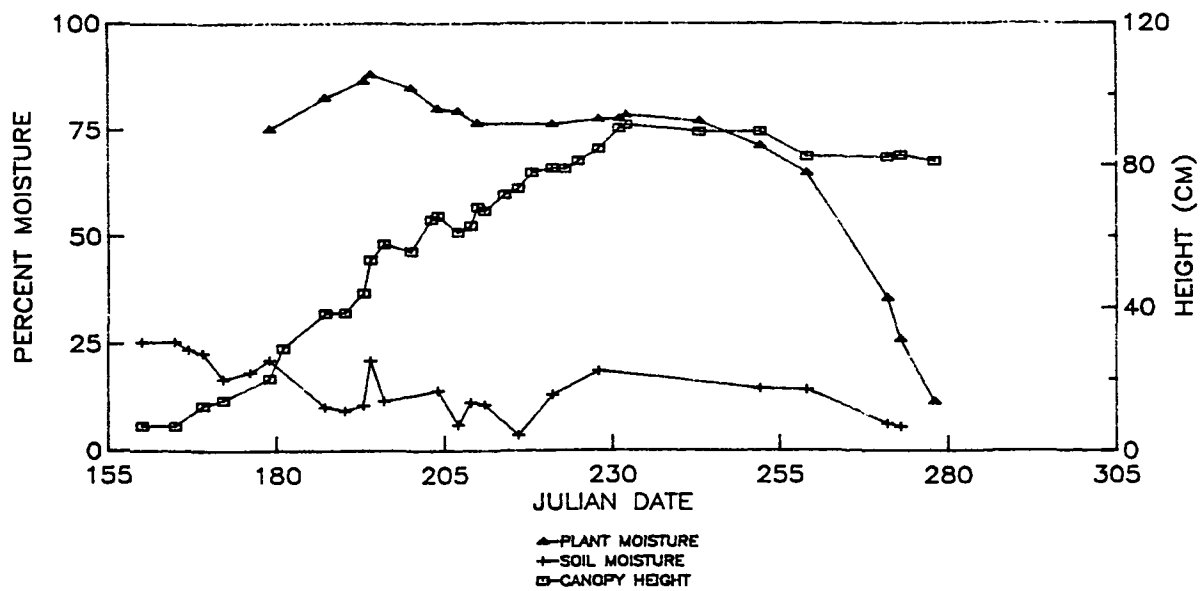
SOYBEAN FIELD 4



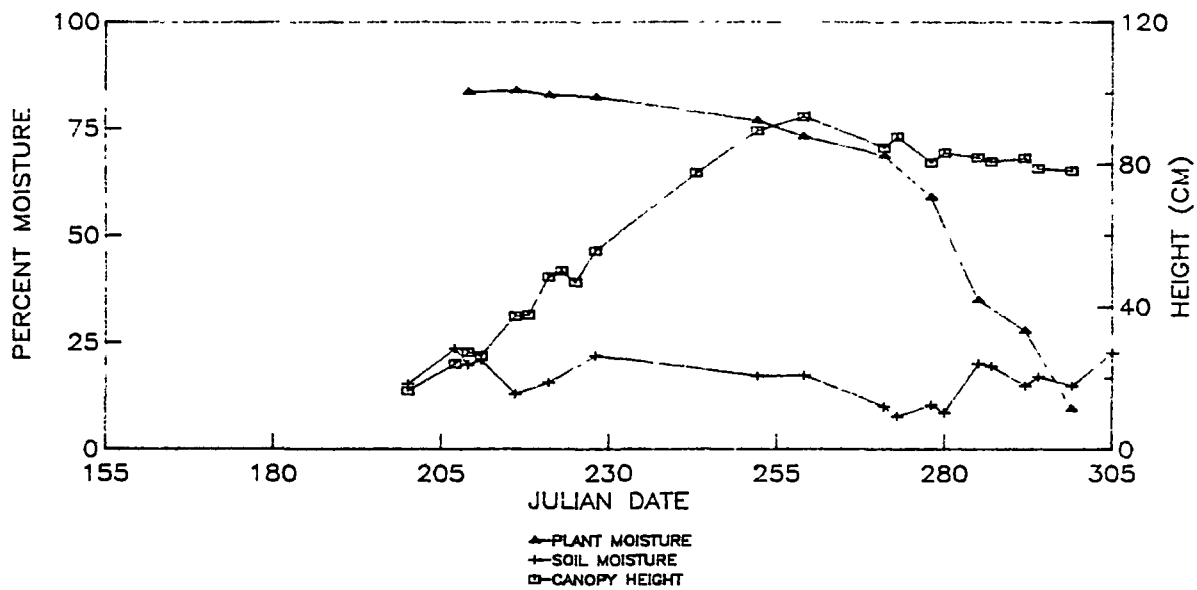
SOYBEAN FIELD 5



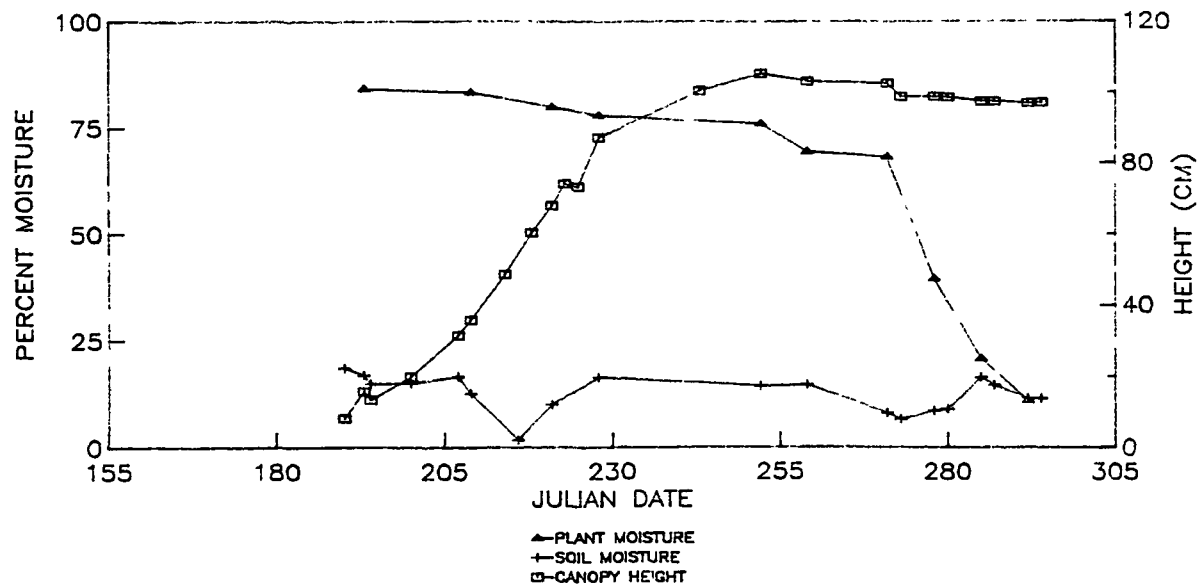
SOYBEAN FIELD 6



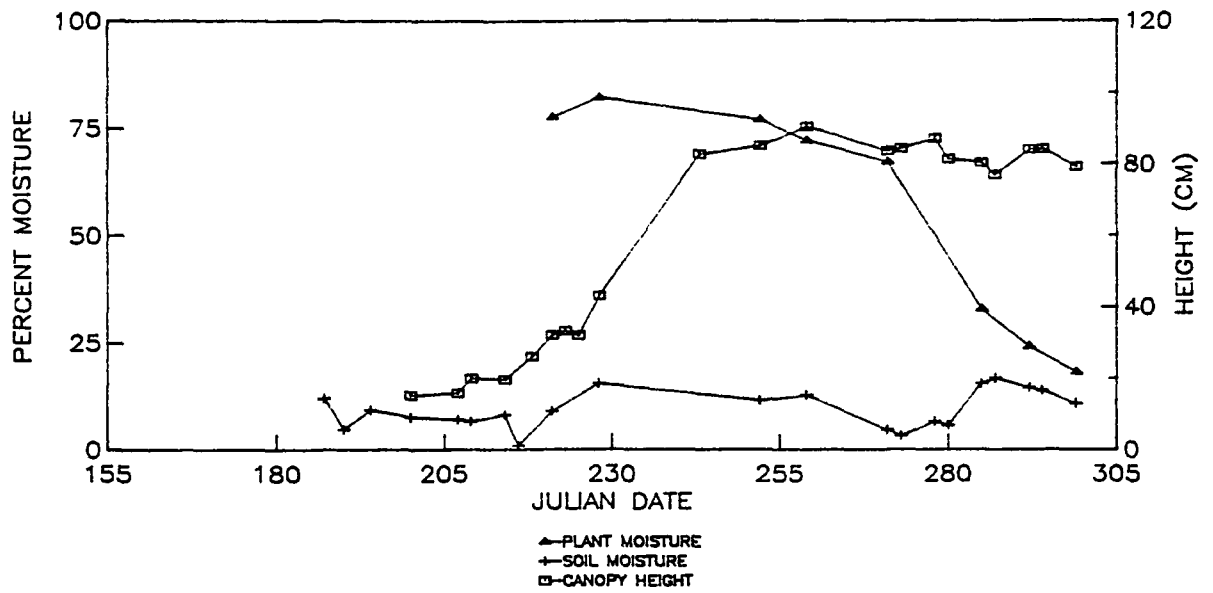
SOYBEAN FIELD 7



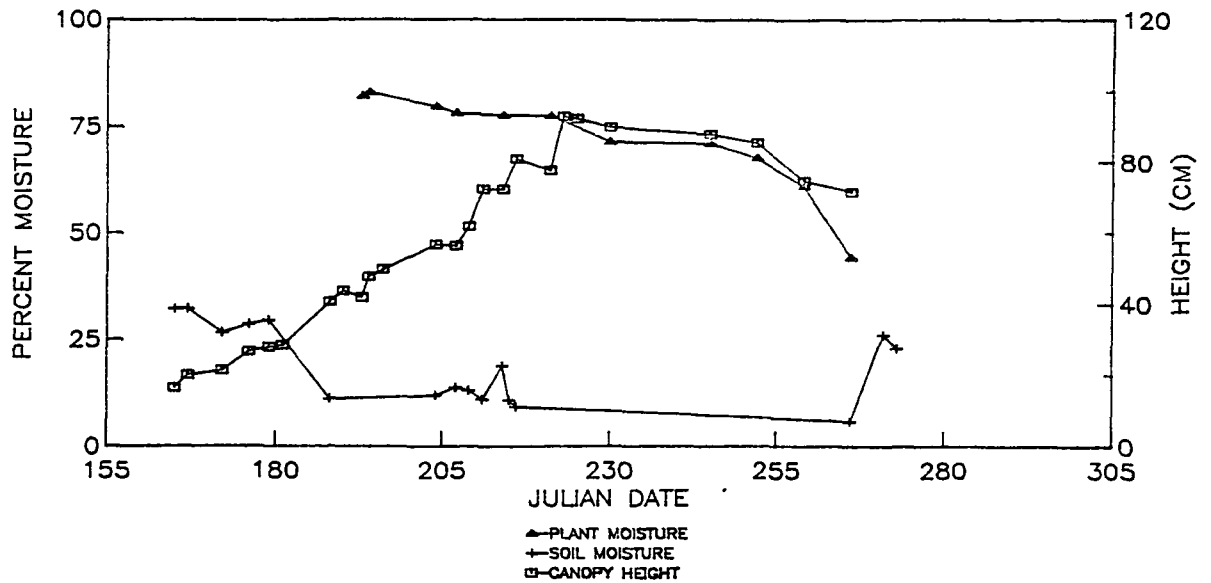
SOYBEAN FIELD 8



SOYBEAN FIELD 9



SOYBEAN FIELD 10



iii.i.15

APPENDIX III.j

WEATHER DATA

Notes:

1. Precipitation on the test site was recorded at about 08:30 every day from four rain gauges (see Fig. 2).
2. Precipitation data collected by the University of Kansas were recorded at 16:00 every day.
3. Wind speed is in km per hour; G stands for gust.

DATE	TEMP (°C)		HUMIDITY		DATE	TEMP (°C)		HUMIDITY		PRECIPITATION (mm)				WIND	
	Max	Min	7am	4pm		Max	Min	7am	4pm	#1	#2	#3	#4	KU	WIND SPEED DIREC
4/25/82	13	8	88	94	6/ 6/82	27	14	94	69	34.0	-	17.0	38.0	0.	16G40 SSW
4/26/82	22	7	95	27	6/ 7/82	27	19	81	41	1.4	6.0	15.0	9.0	13.7	5 E
4/27/82	18	9	88	35	6/ 8/82	31	17	98	57	0	0	0	0	0.3	24G40 S
4/28/82	10	7	49	100	6/ 9/82	25	11	100	59	34.0	-	17.0	38.0	18.5	14 N
4/29/82	13	9	100	71	6/10/82	25	16	82	26	0	0	0	0	0.	3 SW
4/30/82	18	12	97	56	6/11/82	21	12	82	70	-	-	-	-	3.6	10 ENE
5/ 1/82	19	10	89	53	6/12/82	24	15	100	42	3	4.0	4.0	3.0	0.	5 NE
5/ 2/82	23	14	96	33	6/13/82	27	17	94	41	0	0	0	0	0.	6 SSW
5/ 3/82	26	17	73	55	6/14/82	27	17	89	79	-	-	-	-	7.9	16 SSW
5/ 4/82	28	18	89	45	6/15/82	26	14	100	64	36.0	36.0	38.0	38.0	30.2	18 NE
5/ 5/82	25	9	85	74	6/16/82	25	15	93	31	0	0	0	0	0.	2
5/ 6/82	12	7	100	61	6/17/82	28	18	82	41	0	0	0	0	0.	18 S
5/ 7/82	22	12	87	20	6/18/82	27	14	99	92	0	0	0	0	10.9	10 N
5/ 8/82	26	16	71	33	6/19/82	25	17	95	35	1	5.0	9.0	2.0	2.5	8 W
5/ 9/82	27	17	57	28	6/20/82	29	16	78	49	0	0	0	0	0.	5 N
5/10/82	26	18	64	45	6/21/82	30	15	100	26	1	1.0	3.0	2.0	0.8	8 S
5/11/82	23	15	74	79	6/22/82	29	17	100	34	5.0	2.0	3.0	4.0	2.3	2 S
5/12/82	22	17	100	72	6/23/82	25	18	70	72	0	0	0	0	26.9	8 S
5/13/82	21	17	100	85	6/24/82	30	20	100	50	0	0	0	0	0.	13 S
5/14/82	24	14	100	57	6/25/82	28	19	96	53	0	-	-	-	0.5	5 N
5/15/82	25	16	97	48	6/26/82	29	20	100	50	0	0	0	0	0.	16 ENE
5/16/82	23	16	97	51	6/27/82	27	18	100	56	0	0	0	0	1.8	10 W
5/17/82	23	15	99	61	6/28/82	30	21	100	47	12	7.0	8.0	10.0	0.	10 WSW
5/18/82	26	17	97	51	6/29/82	34	22	90	33	0	0	0	0	0.	2
5/19/82	25	19	100	70	6/30/82	29	20	94	56	0	0	0	0	0.	18 SE
5/20/82	27	14	80	57	7/ 1/82	26	21	100	65	0	0	0	0	0.8	6 E
5/21/82	24	12	97	51	7/ 2/82	32	24	83	58	1	2.0	3.0	1.0	5.8	24G35 SSW
5/22/82	21	12	90	46	7/ 3/82	35	24	90	43	0	0	0	0	0	10 S
5/23/82	24	15	99	49	7/ 4/82	35	24	94	45	0	0	0	0	0.	23 S
5/24/82	22	17	96	84	7/ 5/82	34	25	85	46	0	0	0	0	0.	26 S
5/25/82	24	14	100	87	7/ 6/82	32	18	79	62	0	0	0	0	-	24 SSW
5/26/82	22	12	95	63	7/ 7/82	32	18	85	28	0	0	0	0	0.	10 N
5/27/82	27	18	97	41	7/ 8/82	32	22	90	33	0	0	0	0	0.	2
5/28/82	27	17	86	61	7/ 9/82	27	19	95	64	0	0	0	0	0.5	5 SE
5/29/82	30	18	98	51	7/10/82	29	19	98	50	25	0	18.0	14	0	10 NW
5/30/82	24	14	97	86	7/11/82	31	19	89	35	0	0	0	0	0.	11 N
5/31/82	17	8	97	53	7/12/82	33	21	91	34	0	0	0	0	0.	5 SW
6/ 1/82	21	12	87	42	7/13/82	31	22	90	48	10	0	10.0	1.0	-	1.5 S
6/ 2/82	16	12	86	97	7/14/82	29	23	98	64	0	-	1.0	-	0.8	24 SSW
6/ 3/82	20	13	100	75	7/15/82	33	24	89	50	0	0	0	0	0.	19 S
6/ 4/82	18	12	100	77	7/16/82	34	25	92	45	0	0	0	0	0.	16 S
6/ 5/82	23	17	100	51											

III-j-2

III-j-3

DATE	TEMP (°C)		HUMIDITY 7am 4pm	PRECIPITATION (mm)				WIND SPEED DIREC	WIND SPEED DIREC
	Max	Min		#1	#2	#3	#4		
7/17/82	35	26	87 47	0	0	0	0	26	S
7/18/82	36	26	83 45	0	0	0	0	24	S
7/19/82	36	24	76 47	0	0	0	0	19	S
7/20/82	36	21	96 41	0	0	0	0	11	S
7/21/82	34	24	100 62	10.0	7.0	6.0	-	8	NE
7/22/82	32	21	92 43	0	0	0	0	18	NE
7/23/82	32	21	100 40	0	0	0	0	14	E
7/24/82	33	21	90 37	0	0	0	0	16	S
7/25/82	34	23	100 33	0	0	0	0	11	S
7/26/82	36	23	91 35	0	0	0	0	5	SW
7/27/82	35	21	97 65	0	0	0	0	11	S
7/28/82	31	18	100 40	0	0	0	0	16	NE
7/29/82	31	21	91 37	0	0	0	0	14	NNE
7/30/82	31	17	94 38	0	0	0	0	16	NE
7/31/82	33	22	97 29	0	0	0	0	10	SSW
8/ 1/82	35	22	65 36	0	0	0	0	13	SSW
8/ 2/82	36	26	90 38	0	0	0	0	11	S
8/ 3/82	37	26	83 35	0	0	0	0	16	S
8/ 4/82	38	22	80 38	0	0	0	0	16	S
8/ 5/82	31	23	100 64	23.5	22.0	19.0	27.5	13	E
8/ 6/82	31	23	100 85	26.0	24.0	24.0	28.0	8	NE
8/ 7/82	32	22	100 57	12.0	6.0	2.0	11.0	16	NE
8/ 8/82	33	18	100 33	0	0	0	0	11	NE
8/ 9/82	30	17	88 36	0	0	0	0	3	E
8/10/82	19	14	91 90	2.0	-	-	1.0	16	ENE
8/11/82	23	18	100 63	6.7	4.0	4.0	3.0	16	SE
8/12/82	23	19	100 90	6.0	3.5	3.0	4.0	29	SE
8/13/82	27	21	100 75	28.0	24.0	26.0	26.0	16	SE
8/14/82	26	23	100 78	0	-	-	-	16	SE
8/15/82	31	23	100 64	8.3	4.8	1.5	9.5	4.3	N
8/16/82	28	21	100 72	0	0	0	0	32	NE
8/17/82	30	19	100 46	0	0	0	0	32	S
8/18/82	30	21	100 48	0	0	0	0	16	S
8/19/82	32	22	90 42	0	0	0	0	16	SW
8/20/82	31	18	80 63	0	0	0	0	19	N
8/21/82	30	20	87 28	3.0	2.0	5.0	4.0	6	ESE
8/22/82	36	19	82 35	13.0	14.0	17.0	12.0	2	
8/23/82	29	21	96 56	0	0	0	0	11.9	SW
8/24/82	26	14	96 75	-	-	-	-	8	NW
8/25/82	28	19	97 37	0	0	0	0	10.3	S
8/26/82	24	19	89 83	-	-	-	-	12.2	E
8/27/82	26	18	93 20	-	-	-	-	26	S
8/28/82	23	19	95 77	-	-	-	-	6	E
8/30/82	31	24	95 52	-	-	-	-	14	SSW
8/31/82	31	24	81 67	-	-	-	-	19	S
9/ 1/82	31	22	86 60	-	-	-	-	6	S
9/ 2/82	28	17	95 29	-	-	-	-	27	NE
9/ 3/82	31	18	70 30	-	-	-	-	10	W
9/ 4/82	32	19	86 33	-	-	-	-	29	SSW
9/ 5/82	29	19	79 45	-	-	-	-	19	SSW
9/ 6/82	21	18	97 90	-	-	-	-	13	NE
9/ 7/82	27	18	98 53	-	-	-	-	8	E
9/ 8/82	27	20	96 57	-	-	-	-	13	SE
9/ 9/82	28	21	97 55	-	-	-	-	32	45 S
9/10/82	31	20	72 45	-	-	-	-	32	48 S
9/11/82	31	22	88 45	-	-	-	-	0	
9/12/82	32	19	93 46	-	-	-	-	35	S
9/13/82	29	16	98 49	-	-	-	-	16	S
9/14/82	26	15	100 62	-	-	-	-	13	W
9/15/82	19	11	86 53	-	-	-	-	13	N
9/16/82	24	18	97 49	-	-	-	-	14	S
9/17/82	26	11	96 78	-	-	-	-	35	55 NE
9/18/82	22	12	96 27	-	-	-	-	16	N
9/19/82	25	8	78 38	-	-	-	-	23	SSW
9/20/82	17	6	95 44	-	-	-	-	29	42 NE
9/21/82	19	7	96 31	-	-	-	-	19	ENE
9/22/82	23	14	78 30	-	-	-	-	8	SW
9/23/82	23	13	69 50	-	-	-	-	19	SW
9/24/82	24	8	86 44	-	-	-	-	26	N
9/25/82	20	7	98 36	-	-	-	-	18	N
9/26/82	23	10	98 32	-	-	-	-	16	S
9/27/82	25	17	97 32	-	-	-	-	26	SE
9/28/82	30	21	68 43	-	-	-	-	42	67 S
9/29/82	28	18	56 47	-	-	-	-	29	S
9/30/82	30	17	88 49	-	-	-	-	19	S
10/ 1/82	29	17	82 37	-	-	-	-	13	S
10/ 2/82	25	12	90 60	-	-	-	-	8	N
10/ 3/82	27	12	89 20	-	-	-	-	2	
10/ 4/82	28	19	98 43	-	-	-	-	21	S
10/ 5/82	32	20	74 31	-	-	-	-	29	S
10/ 6/82	22	7	74 43	-	-	-	-	32	657 NW
10/ 7/82	26	18	93 20	-	-	-	-	32	S

III.J-4

III.J-5

<u>DATE</u>	<u>TEMP (°C)</u>		<u>HUMIDITY</u>		<u>PRECIPITATION (mm)</u>					<u>WIND</u>	
	<u>Max</u>	<u>Min</u>	<u>7am</u>	<u>4pm</u>	<u>#1</u>	<u>#2</u>	<u>#3</u>	<u>#4</u>	<u>KU</u>	<u>SPEED</u>	<u>DIREC</u>
10/ 8/82	24	11	100	98	-	-	-	-	25.1	32	S
10/ 9/82	18	8	72	33	-	-	-	-	10.7	39G57	WSW
10/10/82	13	9	65	55	-	-	-	-	0.	23	WNW
10/11/82	18	8	64	27	-	-	-	-	0.	26	W
10/12/82	19	7	69	51	-	-	-	-	0.	8	W
10/13/82	16	4	93	39	-	-	-	-	0.	6	NW
10/14/82	22	9	97	20	-	-	-	-	0.	19	SW
10/15/82	24	6	55	33	-	-	-	-	0.	32G61	N
10/16/82	19	9	85	30	-	-	-	-	0.	6	S
10/17/82	23	11	55	37	-	-	-	-	0.	48	S
10/18/82	24	16	61	49	-	-	-	-	0.	32G51	S
10/19/82	22	2	84	67	-	-	-	-	0.	35G57	NW
10/20/82	12	0	71	33	-	-	-	-	0.	23	N
10/21/82	13	0	98	34	-	-	-	-	0.	6	E
10/22/82	16	3	97	27	-	-	-	-	0.	8	S
10/23/82	18	4	71	20	-	-	-	-	0.	11	S
10/24/82	19	4	65	24	-	-	-	-	0.	13	S
10/25/82	21	7	60	25	-	-	-	-	0.	13	S
10/26/82	19	12	60	30	-	-	-	-	0.	27	S
10/27/82	23	16	45	47	-	-	-	-	0.	48	S
10/28/82	17	6	94	96	-	-	-	-	14.2	6	WNW
10/29/82	19	11	65	23	-	-	-	-	0.	24	SW
10/30/82	19	16	64	58	-	-	-	-	0.	14	S
10/31/82	26	18	98	50	-	-	-	-	0.	27	S
11/ 1/82	20	9	89	85	-	-	-	-	-	14	WNW
11/ 2/82	16	0	96	48	-	-	-	-	0.	19	NNW
11/ 3/82	9	-4	75	31	-	-	-	-	0.	19	NW
11/ 4/82	4	-6	72	32	-	-	-	-	0.	19	NW
11/ 5/82	7	0	82	33	-	-	-	-	0.	6	SSE
11/ 6/82	17	11	60	39	-	-	-	-	0.	19	S

APPENDIX IV

SPECIAL EXPERIMENTS - GROUND-TRUTH DATA VEGETATION AND SOIL MOISTURE

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Corn Defoliation and Row-Vegetation Data

CORN FIELD #21 DATE: 7/14/82 (JULIAN: 195) TIME: 17:00 MEAN CANOPY HEIGHT: 290.17 CM
 TOP LEAF HEIGHT: 280.00 CM TOP COB HEIGHT: 157.00 CM BOTTOM GREEN LEAF HEIGHT: 28.83 CM LEAF LAYER DEPTH: 251.17 CM
 PLANT PARTS: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % PLANT MOISTURE: 74.08 78.32 76.30 84.96 86.76 95.22 88.59 88.06 87.40 76.03 87.20 84.49 86.66 93.34 87.99 87.02
 WET BIOMASS DENSITY: 0.22 0.21 0.41 0.81 0.98 2.50 0.66 2.31 2.85 0.56 1.17 0.43 1.92
 DRY BIOMASS DENSITY: 0.06 0.05 0.10 0.12 0.13 0.29 0.08 0.29 0.36 0.09 0.16 0.17 0.25
 PLANT WATER DENSITY: 0.16 0.17 0.31 0.68 0.85 2.22 0.58 2.02 2.48 0.48 1.01 1.26 1.67

CORN FIELD #21 DATE: 7/14/82 (JULIAN: 195) TIME: 16:00 MEAN CANOPY HEIGHT: 294.67 CM
 TOP LEAF HEIGHT: 268.83 CM TOP COB HEIGHT: 155.83 CM BOTTOM GREEN LEAF HEIGHT: 30.67 CM LEAF LAYER DEPTH: 238.17 CM
 PLANT PARTS: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % PLANT MOISTURE: 77.71 0.17 0.78 83.06 92.53 81.77 90.52 1.11 1.44
 WET BIOMASS DENSITY: 0.17 0.13 0.43 0.20 0.23
 DRY BIOMASS DENSITY: 0.04 0.13 0.91 0.20 0.23
 PLANT WATER DENSITY: 0.13 0.65 1.93 0.20 0.23

CORN FIELD #21 DATE: 7/21/82 (JULIAN: 202) TIME: 12:37 MEAN CANOPY HEIGHT: 296.00 CM
 TOP LEAF HEIGHT: 268.83 CM TOP COB HEIGHT: 159.17 CM BOTTOM GREEN LEAF HEIGHT: 30.67 CM LEAF LAYER DEPTH: 238.17 CM
 PLANT PARTS: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % PLANT MOISTURE: 71.82 71.22 71.55 76.39 78.85 3.14 0.63 1.31 2.06 0.57 0.81 1.38 1.85
 WET BIOMASS DENSITY: 0.25 0.15 0.34 0.77 0.96 3.14 0.63 1.31 2.06 0.57 0.81 1.38 1.85
 DRY BIOMASS DENSITY: 0.07 0.04 0.10 0.18 0.20 0.13 0.32 0.44 0.19 0.13 0.19 0.28 0.37
 PLANT WATER DENSITY: 0.18 0.11 0.24 0.58 0.76 0.51 0.98 1.62 0.44 0.62 0.44 0.62

CORN FIELD #21 DATE: 7/29/82 (JULIAN: 210) TIME: 11:40 MEAN CANOPY HEIGHT: 237.00 CM
 TOP LEAF HEIGHT: 201.50 CM TOP COB HEIGHT: 135.67 CM BOTTOM GREEN LEAF HEIGHT: 33.33 CM LEAF LAYER DEPTH: 168.17 CM
 PLANT PARTS: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % PLANT MOISTURE: 66.97 65.71 66.32 72.23 74.54 83.98 80.17 75.84 79.96 87.77 79.80 72.92 77.87 84.22 80.83 79.46
 WET BIOMASS DENSITY: 0.19 0.11 0.22 0.49 0.61 3.04 0.57 1.64 2.10 0.44 0.79 1.47 1.78
 DRY BIOMASS DENSITY: 0.06 0.04 0.07 0.14 0.16 0.60 0.14 0.33 0.42 0.12 0.17 0.28 0.37
 PLANT WATER DENSITY: 0.13 0.07 0.14 0.36 0.46 2.43 0.44 1.31 1.67 0.32 0.61 1.19 1.42

CORN FIELD #21 DATE: 8/17/82 (JULIAN: 229) TIME: 13:00 MEAN CANOPY HEIGHT: 294.00 CM
 TOP LEAF HEIGHT: 267.00 CM TOP COB HEIGHT: 163.07 CM BOTTOM GREEN LEAF HEIGHT: 57.17 CM LEAF LAYER DEPTH: 209.83 CM
 PLANT PARTS: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % PLANT MOISTURE: 68.10 69.06 68.49 75.28 78.41 91.72 85.59 77.07 82.95 70.15 80.12 74.49 80.80 88.33 84.45 82.74
 WET BIOMASS DENSITY: 0.26 0.13 0.32 0.68 0.94 3.86 0.64 1.76 2.44 0.53 0.94 1.83 2.21
 DRY BIOMASS DENSITY: 0.08 0.04 0.10 0.17 0.20 0.56 0.15 0.30 0.49 0.14 0.18 0.28 0.38
 PLANT WATER DENSITY: 0.18 0.09 0.22 0.51 0.74 3.31 0.49 1.46 1.96 0.40 0.76 1.55 1.83

CORN FIELD #21 DATE: 9/21/82 (JULIAN: 264) TIME: 11:30 MEAN CANOPY HEIGHT: 251.17 CM
 TOP LEAF HEIGHT: 207.00 CM TOP COB HEIGHT: 139.33 CM BOTTOM GREEN LEAF HEIGHT: 25.17 CM LEAF LAYER DEPTH: 209.83 CM
 PLANT PARTS: L1L L1S TOP1/3 L2L L2S L2C MID1/3 L3L L3S L3C LOW1/3 L123L L123S COBS L123SC WHOLE
 % PLANT MOISTURE: 5.59 10.85 7.47 9.58 49.15 26.69 28.32 6.28 72.67 2.29 0.98 7.55 86.16
 WET BIOMASS DENSITY: 0.04 0.10 0.12 0.26 2.29 0.98 7.55 86.16
 DRY BIOMASS DENSITY: 0.03 0.09 0.11 0.13 1.64 0.27 0.43 0.14
 PLANT WATER DENSITY: 0.00 0.01 0.01 0.13 0.65 0.71 0.28 0.28

Corn Defoliation - Soil Moisture Data

Corn Defoliation		Field# 21		Date 7/14/82 (Julian. 195)		Time 11 00	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage. 1 Full Canopy)						
0-2 cm	24 93 28 58 19 03 22 91 21 81 21 33						
2-5 cm	25 65 24 13 18 79 21 45 20 15 21 01						
0-5 cm	25 36 25 91 18 88 22 03 20 81 21 13						
Depth	LOC 7 LOC 8 LOC 9 LOC 10 LOC 11 LOC 12	Mean		S.D. S.D./Mean			
0-2 cm	24 06 25 89 30 60 23 93 26 33 22 38	24.31	3 21	1 32			
2-5 cm	23 04 24 74 27 97 23 00 25 23 21 89 23 09	23.09	2.60	1.13			
0-5 cm	23 44 25 20 29 02 23 37 25 67 22 08 23 58	23.58	2.85	1.21			

Corn Defoliation		Field# 21		Date 7/14/82 (Julian. 195)		Time 15 50	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage 2 No Leaves)						
0-2 cm	24 33 23 30 17 69 20 76 20 21 17 48						
2-5 cm	24 19 21 55 18 77 21 27 20 58 19 10						
0-5 cm	24 25 22 25 18 34 21 07 20 43 18 45						
Depth	LOC 7 LOC 8 LOC 9 LOC 10 LOC 11 LOC 12	Mean		S.D. S.D./Mean			
0-2 cm	19 86 18 50 26 47 11 90 21 91 19 55 20 16	18.66	3 76	1.86			
2-5 cm	19 42 19 55 25 87 22 50 22 24 19 82 21 24	19.82	2 18	1.02			
0-5 cm	19 60 19 13 26 11 18 26 22 10 19 71 20 81	19.71	2 81	1.36			

Corn Defoliation		Field# 21		Date 7/14/82 (Julian. 195)		Time 19:00	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage. 3 Bare Soil)						
0-2 cm	24 43 20 30 21 97 20 48 20 28 19 19						
2-5 cm	24 22 21 49 23 14 21 98 21 77 20 22						
0-5 cm	24 31 21 01 22 68 21 38 21 17 19 81						
Depth	LOC 7 LOC 8 LOC 9 LOC 10 LOC 11 LOC 12	Mean		S.D. S.D./Mean			
0-2 cm	20 98 22 77 24 23 21 08 20 28 19 39 21 28	21.28	1.73	0.81			
2-5 cm	21 49 23 30 24 19 21 79 25 22 21 58 22 53	22.53	1.47	0.65			
0-5 cm	21 29 23 09 24 21 21 51 23 25 20 70 22 03	22.03	1.57	0.72			

Corn Screen DEF. (Before)		Field# 21		Date 7/29/82 (Julian 210)		Time 11:40	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6	Mean		S.D. S.D./Mean			
0-2 cm	2 78 4 30 5 67 5 43	4.54	1 32	2 91			
2-5 cm	6 98 8 72 10 35 10 50	9 14	1 65	1 81			
0-5 cm	5 30 6 95 8 48 8 47	7.30	1 52	2 25			

IV.2

Corn Defoliation		Field# 21		Date 8/17/82 (Julian: 229)		Time	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage. 1 Full Canopy)						
0-2 cm	26 07 25 69 22 87 22 00 5 82 23 93						
2-5 cm	25 73 25 90 25 30 21 81 21 41 21 62						
0-5 cm	25 87 25 82 24 33 21 89 15 17 22 55						
Depth	LOC 7 LOC 8 LOC 9 LOC 10 LOC 11 LOC 12	Mean		S.D. S.D./Mean			
0-2 cm	24 62 25 87 27 43 25 58 23 61 23 13 23 05	23.61	23 13	23.05	5.65	2.45	
2-5 cm	25 67 23 97 19 99 25 86 22 11 23 04 23 53	23.04	23 53	23.13	0 90		
0-5 cm	25 25 24 73 22 97 25 75 22 71 23 08 23 34	23.34	23 34	23.54	1 52		

Corn Defoliation		Field# 21		Date 8/17/82 (Julian: 229)		Time	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage 2 No Leaves)						
0-2 cm	25 75 26 86 24 05 21 25 21 81 24 40						
2-5 cm	25 52 26 99 25 02 21 58 22 46 24 75						
0-5 cm	25 61 26 94 24 63 21 45 22 20 24 61						
Depth	LOC 7 LOC 8 LOC 9 LOC 10 LOC 11 LOC 12	Mean		S.D. S.D./Mean			
0-2 cm	26 86 23 23 25 25 24 91 25 11 23 53 24 42	24.42	1 77	0 72			
2-5 cm	27 66 23 91 25 29 25 27 24 49 23 12 24 67	24.67	1 74	0 71			
0-5 cm	27 34 23 64 25 27 25 13 24 74 23 29 24 57	24.57	1 75	0 71			

Corn Defoliation		Field# 21		Date 8/17/82 (Julian: 229)		Time	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage: 3 Bare Soil)						
0-2 cm	25 43 26 29 24 31 19 50 22 21 24 14						
2-5 cm	24 86 27 07 24 30 20 01 22 19 24 96						
0-5 cm	25 09 26 76 24 31 19 81 22 20 24 63						
Depth	LOC 7 LOC 8 LOC 9 LOC 10 LOC 11 LOC 12	Mean		S.D. S.D./Mean			
0-2 cm	26 58 23 53 23 30 25 14 22 78 23 67 23 91	23.91	1.93	0.81			
2-5 cm	25 50 23 94 30 11 24 40 23 88 22 79 24 50	24.50	2.50	1 02			
0-5 cm	25 93 23 77 27 39 24 70 23 44 23 14 24 26	24.26	2 27	0 93			

Corn Defoliation		Field# 21		Date 9/21/82 (Julian. 264)		Time: 11:30	
Depth	LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage 1 Full Canopy)						
0-2 cm	22 02 29 20 22 72 20 73 16 74 21 38						
2-5 cm	24 32 23 62 21 68 23 58 18 08 20 85						
0-5 cm	23 40 25 85 22 10 22 44 17 54 21 06						
Depth	LOC 7 LOC 8 LOC 9 LOC 10 LOC 11 LOC 12	Mean		S.D. S.D./Mean			
0-2 cm	21 05 20 62 22 05 18 19 20 67 20 55 21 33	20.55	21 33	2.98	1 40		
2-5 cm	21 45 22 71 23 08 19 35 20 31 21 89 21 74	21.89	21 74	1.87	0 86		
0-5 cm	21 29 21 87 22 67 18 89 20 46 21 35 21 58	21.35	21 58	2.31	1 07		

IV.3

Corn Row - Soil Moisture Data

Corn Defoliation										Field#:21 Date: 9/21/82 (Julian: 264)										Time: 12:00												
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 2)	No Leaves)	Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 3)	No Cobs)	Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 4)	Bare Soil)			
0-2 cm		18.09	23.41	21.14	18.04	17.99	19.46			0-2 cm		18.72	19.85	18.88	19.99	16.16	20.58			0-2 cm		19.01	19.99	19.10	16.73	18.49	20.31					
2-5 cm		22.02	21.74	30.48	20.59	20.14	22.10			2-5 cm		22.60	19.26	19.73	20.52	20.21	19.22			2-5 cm		23.18	21.19	21.09	18.36	20.53	20.69					
0-5 cm		20.45	22.41	26.74	19.57	19.28	21.05			0-5 cm		21.05	19.49	19.39	20.30	18.59	19.76			0-5 cm		21.51	20.71	20.29	17.71	19.72	20.54					
Depth		LOC 7	LOC 8	LOC 9	LOC10	LOC11	LOC12	Mean	S.D	S.D./Mean	Depth		LOC 7	LOC 8	LOC 9	LOC10	LOC11	LOC12	Mean	S.D	S.D./Mean	Depth		LOC 7	LOC 8	LOC 9	LOC10	LOC11	LOC12	Mean	S.D	S.D./Mean
0-2 cm		22.10	18.65	18.15	18.16	15.84	13.72	18.73	2.61	1.40	0-2 cm		20.29	17.98	16.78	19.86	16.71	13.87	18.31	2.05	1.12	0-2 cm		18.67	20.02	13.30	16.15	15.80	15.75	17.78	2.19	1.23
2-5 cm		24.01	21.93	20.93	19.49	18.70	15.85	21.50	3.50	1.63	2-5 cm		21.38	21.07	20.11	17.40	18.84	18.72	19.92	1.38	0.69	2-5 cm		20.56	21.65	17.90	20.87	18.34	17.64	20.17	1.72	0.85
0-5 cm		23.25	20.62	19.82	18.96	17.56	15.00	20.39	3.14	1.53	0-5 cm		20.94	19.83	18.78	18.38	17.99	16.78	19.27	1.65	0.87	0-5 cm		19.81	21.00	16.06	18.98	17.33	16.89	19.21	1.91	1.00
Corn Defoliation										Field#: 21 Date 9/21/82 (Julian: 264)										Time: 15 45												
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 3)	No Cobs)	Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 3)	No Cobs)	Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 4)	Bare Soil)			
0-2 cm		18.72	19.85	18.88	19.99	16.16	20.58			0-2 cm		20.29	17.98	16.78	19.86	16.71	13.87	18.31	2.05	1.12	0-2 cm		18.67	20.02	13.30	16.15	15.80	15.75	17.78	2.19	1.23	
2-5 cm		22.60	19.26	19.73	20.52	20.21	19.22			2-5 cm		21.38	21.07	20.11	17.40	18.84	18.72	19.92	1.38	0.69	2-5 cm		20.56	21.65	17.90	20.87	18.34	17.64	20.17	1.72	0.85	
0-5 cm		21.05	19.49	19.39	20.30	18.59	19.76			0-5 cm		21.05	19.49	19.39	20.30	18.59	19.76			0-5 cm		21.51	20.71	20.29	17.71	19.72	20.54			1.91	1.00	
Corn Defoliation										Field#:21 Date: 9/22/82 (Julian: 265)										Time: 12:00												
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 4)		Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 4)		Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 4)				
0-2 cm		19.01	19.99	19.10	16.73	18.49	20.31			0-2 cm		19.01	19.99	19.10	16.73	18.49	20.31			0-2 cm		19.01	19.99	19.10	16.73	18.49	20.31					
2-5 cm		23.18	21.19	21.09	18.36	20.53	20.69			2-5 cm		23.18	21.19	21.09	18.36	20.53	20.69			2-5 cm		23.18	21.19	21.09	18.36	20.53	20.69					
0-5 cm		21.51	20.71	20.29	17.71	19.72	20.54			0-5 cm		21.51	20.71	20.29	17.71	19.72	20.54			0-5 cm		21.51	20.71	20.29	17.71	19.72	20.54					
Corn Defoliation										Field#:21 Date: 9/22/82 (Julian: 265)										Time: 12:00												
Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 4)		Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 4)		Depth		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	LOC 6 (Stage: 4)				
0-2 cm		18.67	20.02	13.30	16.15	15.80	15.75	17.78	2.19	1.23	0-2 cm		18.67	20.02	13.30	16.15	15.80	15.75	17.78	2.19	1.23	0-2 cm		18.67	20.02	13.30	16.15	15.80	15.75	17.78	2.19	1.23
2-5 cm		20.56	21.65	17.90	20.87	18.34	17.64	20.17	1.72	0.85	2-5 cm		20.56	21.65	17.90	20.87	18.34	17.64	20.17	1.72	0.85	2-5 cm		20.56	21.65	17.90	20.87	18.34	17.64	20.17	1.72	0.85
0-5 cm		19.81	21.00	16.06	18.98	17.33	16.89	19.21	1.91	1.00	0-5 cm		19.81	21.00	16.06	18.98	17.33	16.89	19.21	1.91	1.00	0-5 cm		19.81	21.00	16.06	18.98	17.33	16.89	19.21	1.91	1.00

Corn Row Before			Field#:#21 Date: 7/21/82 (Julian:202)										Time. 12 37						
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	22.85	19.02	21.52	22.59	23.58	23.38	22.16	1.70	0.77	0-2 cm	22.85	19.02	21.52	22.59	23.58	23.38	22.16	1.70	0.77
2-5 cm	21.60	15.78	20.92			20.20	19.63	2.63	1.34	2-5 cm	21.60	15.78	20.92			20.20	19.63	2.63	1.34
5-9 cm	21.31	14.60	19.14	20.56	11.83	16.50	17.32	3.69	2.13	5-9 cm	21.31	14.60	19.14	20.56	11.83	16.50	17.32	3.69	2.13
9-15cm	13.88	14.93	19.37	26.49	15.19	15.32	17.53	4.78	2.73	9-15cm	13.88	14.93	19.37	26.49	15.19	15.32	17.53	4.78	2.73
0-5 cm	22.10	17.08	21.59			21.47	20.64	2.26	1.11	0-5 cm	22.10	17.08	21.59			21.47	20.64	2.26	1.11
0-9 cm	21.75	15.98	21.13			19.26	19.17	2.89	1.56	0-9 cm	21.75	15.98	21.13			19.26	19.17	2.89	1.56
0-15cm	18.60	15.56	23.28			17.68	18.51	3.65	2.03	0-15cm	18.60	15.56	23.28			17.68	18.51	3.65	2.03

Corn Row After			Field#:#21 Date: 7/21/82 (Julian:202)										Time.						
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean
0-2 cm	20.88	19.15	22.03	17.63	21.23	11.69	18.77	3.81	2.03	0-2 cm	20.88	19.15	22.03	17.63	21.23	11.69	18.77	3.81	2.03
2-5 cm	19.97	22.52	17.48	23.56	19.50		20.61	2.44	1.18	2-5 cm	19.97	22.52	17.48	23.56	19.50		20.61	2.44	1.18
5-9 cm	17.39	18.49	18.12	21.22	17.45		18.53	1.57	0.85	5-9 cm	17.39	18.49	18.12	21.22	17.45		18.53	1.57	0.85
9-15cm	15.54	15.66	17.44	20.89	18.84	18.68	17.84	2.06	1.16	9-15cm	15.54	15.66	17.44	20.89	18.84	18.68	17.84	2.06	1.16
0-5 cm	20.34	21.17	19.30	21.19	20.19		19.87	2.99	1.52	0-5 cm	20.34	21.17	19.30	21.19	20.19		19.87	2.99	1.52
0-9 cm	19.03	19.98	18.77	21.21	18.97		19.28	2.36	1.22	0-9 cm	19.03	19.98	18.77	21.21	18.97		19.28	2.36	1.22
0-15cm	17.63	18.25	18.24	21.08	18.92		18.70	2.24	1.20	0-15cm	17.63	18.25	18.24	21.08	18.92		18.70	2.24	1.20

Corn Row Day After			Field#:#21 Date 7/22/82 (Julian 203)										Time.								
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D	S.D./Mean		
0-2 cm	11.94	18.82	18.97	23.44	15.65	13.81	10.92	14.89	3.80	2.55	0-2 cm	11.94	18.82	18.97	23.44	15.65	13.81	10.92	14.89	3.80	2.55
2-5 cm	13.68	19.27	22.87	23.44	15.65	13.34	18.04	4.49	2.49	2-5 cm	13.68	19.27	22.87	23.44	15.65	13.34	18.04	4.49	2.49	2.49	2.49
5-9 cm	13.61	19.16	18.90	23.09	15.90	13.90	17.43	3.65	2.09	5-9 cm	13.61	19.16	18.90	23.09	15.90	13.90	17.43	3.65	2.09	2.09	2.09
9-15cm	13.74	18.16	18.00	22.21	15.20	13.62	16.82	3.30	1.96	9-15cm	13.74	18.16	18.00	22.21	15.20	13.62	16.82	3.30	1.96	1.96	1.96
0-5 cm	12.98	19.09	21.31		14.91	12.37	16.78	4.21	2.51	0-5 cm	12.98	19.09	21.31		14.91	12.37	16.78	4.21	2.51	2.51	2.51
0-9 cm	13.26	19.12	20.24		15.35	13.05	17.07	3.96	2.33	0-9 cm	13.26	19.12	20.24		15.35	13.05	17.07	3.96	2.33	2.33	2.33
0-15cm	13.46	18.74	19.34		15.29	13.28	16.97	3.70	2.18	0-15cm	13.46	18.74	19.34		15.29	13.28	16.97	3.70	2.18	2.18	2.18

Corn Row After		Field#-21 Date: 7/21/82 (Julian:202)										Time.	
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D.	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean <td>S D.<td>S.D./Mean</td><td></td><td></td></td>	S D. <td>S.D./Mean</td> <td></td> <td></td>	S.D./Mean				
0-2 cm	20.88	19.15	22.03	17.63	21.23	11.69	18.77	3.81	2.03				
2-5 cm	19.97	22.52	17.48	23.56	19.50		20.61	2.44	1.18				
5-9 cm	17.39	18.49	18.12	21.22	17.45		18.53	1.57	0.85				
9-15cm	15.54	15.66	17.44	20.89	18.84	18.68	17.84	2.06	1.16				
0-5 cm	20.34	21.17	19.30	21.19	20.19		19.87	2.99	1.52				
0-9 cm	19.03	19.98	18.77	21.21	18.97		19.28	2.36	1.22				
0-15cm	17.63	18.25	18.24	21.08	18.92		18.70	2.24	1.20				

Corn Row Day After		Field#-21 Date 7/22/82 (Julian 203)										Time.	
		LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S.D./Mean			
Depth	LOC 1	LOC 2	LOC 3 <td>LOC 4<td>LOC 5<td>LOC 6<td>Mean<td>S D<th>S.D./Mean</th><td></td><td></td></td></td></td></td></td>	LOC 4 <td>LOC 5<td>LOC 6<td>Mean<td>S D<th>S.D./Mean</th><td></td><td></td></td></td></td></td>	LOC 5 <td>LOC 6<td>Mean<td>S D<th>S.D./Mean</th><td></td><td></td></td></td></td>	LOC 6 <td>Mean<td>S D<th>S.D./Mean</th><td></td><td></td></td></td>	Mean <td>S D<th>S.D./Mean</th><td></td><td></td></td>	S D <th>S.D./Mean</th> <td></td> <td></td>	S.D./Mean				
0-2 cm	11.94	18.82	18.97		13.81	10.92	14.89	3.80	2.55				
2-5 cm	13.68	19.27	22.87	23.44	15.65	13.34	18.04	4.49	2.49				
5-9 cm	13.61	19.16	18.90	23.09	15.90	13.90	17.43	3.65	2.09				
9-15cm	13.74	18.16	18.00	22.21	15.20	13.62	16.82	3.30	1.96				
0-5 cm	12.98	19.09	21.31		14.91	12.37	16.78	4.21	2.51				
0-9 cm	13.26	19.12	20.24		15.35	13.05	17.07	3.96	2.33				
0-15cm	13.46	18.74	19.34		15.29	13.28	16.97	3.70	2.18				

Corn Row Day After										Field#-21 Date 7/22/82 (Julian 203)										Time.	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S.D./Mean	Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S D	S.D./Mean		
0-2 cm	11.94	18.82	18.97				13.81	10.92	14.89	3.80	2.55										
2-5 cm	13.68	19.27	22.87	23.44	15.65	13.34	18.04	4.49	2.49												
5-9 cm	13.61	19.16	18.90	23.09	15.90	13.90	17.43	3.65	2.09												
9-15cm	13.74	18.16	18.00	22.21	15.20	13.62	16.82	3.30	1.96												
0-5 cm	12.98	19.09	21.31				14.91	12.37	16.78	4.21	2.51										
0-9 cm	13.26	19.12	20.24				15.35	13.05	17.07	3.96	2.33										
0-15cm	13.46	18.74	19.34				15.29	13.28	16.97	3.70	2.18										

Soybean Defoliation - Vegetation Data

Soybean Field # 6 Date: 7/22/82(Julian: 203)
 Time: 10:45 Mean Canopy Height: 55.8 cm
 Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 80.77 86.00 85.53 84.77
 Wet Biomass Density: 1.81 2.99 4.68 3.16
 Dry Biomass Density: 0.35 0.42 0.68 0.48
 Plant Water Density: 1.46 2.57 4.00 2.68

 Soybean Field # 6 Date: 8/31/82(Julian: 243)
 Time: 13:45 Mean Canopy Height: 89.5 cm
 Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 76.67 77.79 76.30 77.03
 Wet Biomass Density: 4.38 6.76 4.75 5.30
 Dry Biomass Density: 1.02 1.50 1.13 1.22
 Plant Water Density: 3.36 5.26 3.62 4.08

 Soybean Field # 6 Date: 10/5/82(Julian: 278)
 Time: 10:45 Mean Canopy Height: 81.3 cm
 Plant Parts. Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 8.91 10.15 15.89 11.49
 Wet Biomass Density: 1.51 2.27 1.58 1.79
 Dry Biomass Density: 1.38 2.04 1.33 1.58
 Plant Water Density: 0.13 0.23 0.25 0.21

Soybean Defoliation - Soil Moisture Data

Soybean DEF (Before) Field# 6 Date: 7/22/82(Julian: 203) Time: 10:45
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 13.90 12.70 11.59 12.95 11.91 14.01 12.84 0.99 0.77
 2-5 cm 11.93 10.42 12.83 12.62 11.95 1.09 0.91
 0-5 cm 12.24 10.89 12.88 13.18 12.31 1.05 0.86

 Soybean DEF (After) Field# 6 Date: 7/22/82(Julian: 203) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 8.54 7.39 9.20 11.39 11.80 8.86 9.53 1.72 1.80
 2-5 cm 11.50 9.08 10.82 12.69 12.96 13.13 11.70 1.57 1.34
 0-5 cm 10.31 8.40 10.17 12.17 12.50 11.42 10.83 1.63 1.53

Soybean Defoliation Field# 6 Date: 8/31/82 (Julian: 243) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage: 1 Full Canopy)
 0-2 cm 20.23 17.76 19.71 17.85 20.62 17.86
 2-5 cm 18.13 17.88 18.02 17.85 19.50 17.03
 0-5 cm 18.97 17.84 18.70 17.85 19.95 17.36
 Depth LOC 7 LOC 8 LOC 9 LOC10 LOC11 LOC12 Mean S.D. S.D./Mean
 0-2 cm 17.60 14.80 18.78 19.71 20.32 21.34 18.88 1.81 0.96
 2-5 cm 17.20 14.71 17.50 18.33 19.61 19.95 17.98 1.40 0.78
 0-5 cm 17.36 14.75 18.02 18.88 19.89 20.51 18.34 1.56 0.85

 Soybean Defoliation Field# 6 Date: 8/31/82 (Julian: 243) Time: 16:00
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage: 2 Bare Soil)
 0-2 cm 16.60 19.16 19.34 18.84 17.69 17.05
 2-5 cm 18.01 18.07 19.23 18.12 17.05 16.17
 0-5 cm 17.44 18.51 19.27 18.41 17.31 16.52
 Depth LOC 7 LOC 8 LOC 9 LOC10 LOC11 LOC12 Mean S.D. S.D./Mean
 0-2 cm 13.43 17.44 16.69 18.39 20.63 27.46 18.56 3.34 1.80
 2-5 cm 13.66 15.93 19.59 17.70 20.61 22.22 18.03 2.26 1.25
 0-5 cm 13.57 16.54 18.43 17.97 20.62 24.32 18.24 2.69 1.47

 Soybean Defoliation Field# 6 Date: 10/5/82 (Julian: 278) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage: 1 Full Canopy)
 0-2 cm 2.62 5.61 5.31 7.97 3.58 4.95
 2-5 cm 4.12 7.81 7.02 8.37 5.89 6.50
 0-5 cm 3.52 6.93 6.34 8.21 4.97 5.88
 Depth LOC 7 LOC 8 LOC 9 LOC10 LOC11 LOC12 Mean S.D. S.D./Mean
 0-2 cm 5.89 7.37 5.88 4.09 7.42 4.65 5.45 1.61 2.96
 2-5 cm 8.39 9.90 9.45 5.79 10.30 4.76 7.36 2.01 2.73
 0-5 cm 7.39 8.88 8.02 5.11 9.15 4.72 6.59 1.85 2.82

 Soybean Defoliation Field# 6 Date: 10/5/82 (Julian: 278) Time: 14:50
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 (Stage: 2 Bare Soil)
 0-2 cm 6.16 5.53 6.49 5.72 7.55 4.74
 2-5 cm 7.85 7.82 8.43 9.48 8.26 11.01
 0-5 cm 7.17 6.90 7.66 7.98 7.98 8.50
 Depth LOC 7 LOC 8 LOC 9 LOC10 LOC11 LOC12 Mean S.D. S.D./Mean
 0-2 cm 5.79 5.57 7.96 3.56 7.38 6.04 1.28 2.12
 2-5 cm 9.61 7.43 7.39 8.51 6.08 8.92 8.40 1.27 1.51
 0-5 cm 8.08 6.69 8.29 5.07 8.30 7.46 1.27 1.76

Soybean Row - Vegetation Data

Soybean Field # 6 Date: 7/29/82(Julian: 210)
 Time: 12:55 Mean Canopy Height: 68.2 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 72.94 78.40 77.38 76.61
 Wet Biomass Density: 3.11 4.61 4.10 3.94
 Dry Biomass Density: 0.84 1.00 0.93 0.92
 Plant Water Density: 2.27 3.61 3.17 3.02

 Soybean Field # 6 Date: 8/19/82(Julian: 231)
 Time: 11:50 Mean Canopy Height: 90.5 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 76.50 78.43 77.62 77.66
 Wet Biomass Density: 3.07 4.77 3.38 3.74
 Dry Biomass Density: 0.72 1.03 0.76 0.84
 Plant Water Density: 2.35 3.74 2.62 2.90

 Soybean Field # 6 Date: 9/30/82(Julian: 273)
 Time: Mean Canopy Height: 83.0 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 15.53 25.16 36.46 26.08
 Wet Biomass Density: 0.96 1.70 1.13 1.27
 Dry Biomass Density: 0.81 1.27 0.72 0.94
 Plant Water Density: 0.15 0.43 0.41 0.33

Soybean Row - Soil Moisture Data

Soybean Row Before Field#: 6 Date: 7/29/82(Julian: 210) Time: 13:00
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 5.27 4.58 9.31 7.49 6.88 5.39 6.49 1.76 2.71
 2-5 cm 6.40 7.08 9.20 8.79 7.91 7.40 7.80 1.06 1.35
 5-9 cm 7.62 7.58 8.48 8.85 9.70 10.71 8.83 1.22 1.38
 9-15 cm 7.52 7.31 4.62 9.84 8.84 8.52 7.77 1.80 2.31
 0-5 cm 5.95 6.08 9.24 8.27 7.50 6.60 7.27 1.34 1.90
 0-9 cm 6.69 6.75 8.90 8.53 8.48 8.43 7.96 1.29 1.67
 0-15 cm 7.02 6.97 7.19 9.06 8.62 8.46 7.89 1.49 1.93

 Soybean Row After Field#: 6 Date: 7/29/82(Julian: 210) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 2.28 1.46 5.48 7.79 9.69 9.78 6.08 3.63 5.97
 2-5 cm 6.63 6.18 8.88 10.00 9.29 11.10 8.68 1.92 2.21
 5-9 cm 6.96 7.48 11.36 8.82 7.80 8.32 8.46 1.56 1.85
 9-15 cm 7.01 6.53 11.24 8.25 7.44 7.87 8.06 1.67 2.08
 0-5 cm 4.89 4.29 7.52 9.12 9.45 10.57 7.64 2.60 3.71
 0-9 cm 5.81 5.71 9.23 8.99 8.72 9.57 8.00 2.14 2.89
 0-15 cm 6.29 6.04 10.03 8.69 8.20 8.89 8.02 1.95 2.56

 Soybean Row After Field#: 6 Date: 7/29/82(Julian: 210) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 2.89 3.60 4.05 1.29 1.57 2.68 1.22 4.54
 2-5 cm 5.60 6.75 7.60 4.36 6.09 6.08 1.22 2.00
 5-9 cm 7.29 7.23 9.01 8.78 8.45 9.53 8.38 0.94 1.12
 9-15 cm 6.89 7.24 9.40 7.99 8.97 10.12 8.44 1.27 1.50
 0-5 cm 4.52 5.49 6.18 3.13 4.28 4.72 1.22 3.02
 0-9 cm 5.75 6.26 7.44 5.50 6.62 6.35 1.09 2.17
 0-15 cm 6.21 6.65 8.22 6.89 8.02 7.18 1.16 1.91

 Soybean Row With Canopy Field#: 6 Date: 8/19/82(Julian: 231) Time: 11:50
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 10.55 10.44 13.72 11.63 12.80 13.18 12.05 1.39 1.15
 2-5 cm 11.39 14.59 11.55 13.04 11.87 12.49 1.34 1.07
 5-9 cm 13.93 13.09 13.52 11.52 11.41 13.08 12.76 1.05 0.82
 9-15 cm 13.06 12.31 14.56 12.04 11.77 12.18 12.66 1.03 0.81
 0-5 cm 11.01 14.24 11.58 12.94 12.39 12.31 1.36 1.10
 0-9 cm 11.93 13.92 11.56 12.26 12.70 12.51 1.22 0.98
 0-15 cm 12.08 14.18 11.75 12.07 12.49 12.57 1.15 0.91

Soybean Row Bare Soil		Field#: 6 Date: 8/19/82(Julian:231) Time: 12:45								
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
0-2 cm		5.65	6.30	5.09	5.53	3.58	5.23	1.02	1.95	
2-5 cm	10.99	11.28	12.09	11.70	12.36	9.62	11.34	0.98	0.86	
5-9 cm	12.46	12.57	11.56	14.56	6.64	12.38	11.69	2.67	2.28	
9-15cm	12.80	13.90	13.25	16.10	14.52	12.57	13.86	1.31	0.95	
0-5 cm		9.03	9.77	9.06	9.63	7.20	8.90	1.00	1.30	
0-9 cm		10.61	10.57	11.50	8.30	9.50	10.14	1.74	1.74	
0-15cm		11.92	11.64	13.34	10.79	10.73	11.63	1.57	1.42	

Soybean Row Before		Field#: 6 Date: 9/30/82(Julian:273) Time:								
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D.	S.D./Mean	
0-2 cm	3.04	5.01	4.53	3.10	3.81	4.73	4.04	0.85	2.10	
2-5 cm	4.56	8.96	8.05	6.67	6.48		6.94	1.68	2.42	
5-9 cm	7.94	10.69	9.48	9.27	8.84	10.98	9.53	1.14	1.20	
9-15cm	9.04	10.89	9.74	10.24	9.59	11.06	10.09	0.78	0.78	
0-5 cm	3.95	7.38	6.64	5.24	5.41		5.78	1.34	2.29	
0-9 cm	5.72	8.85	7.90	7.03	6.94		7.45	1.26	1.80	
0-15cm	7.05	9.67	8.64	8.31	8.00		8.51	1.07	1.39	

Soybean Screen - Vegetation Data

Soybean Field #21 Date: 6/23/82(Julian. 174)
Time: 15:15 Mean Canopy Height: 16.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #21 Date: 6/28/82(Julian. 179)
Time: 14:00 Mean Canopy Height: 19.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 77.67
Wet Biomass Density: 0.97
Dry Biomass Density: 0.22
Plant Water Density: 0.76

Soybean Field #21 Date: 6/30/82(Julian. 181)
Time: Mean Canopy Height: 25.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #21 Date: 7/ 6/82(Julian: 187)
Time: 10:50 Mean Canopy Height: 28.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 85.91
Wet Biomass Density: 1.97
Dry Biomass Density: 0.28
Plant Water Density: 1.70

Soybean Field #21 Date: 7/ 7/82(Julian. 188)
Time: 14:25 Mean Canopy Height: 33.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #21 Date: 7/12/82(Julian. 193)
Time: 09:40 Mean Canopy Height: 38.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 84.98
Wet Biomass Density: 2.73
Dry Biomass Density: 0.41
Plant Water Density: 2.32

Soybean Field #21 Date: 6/16/82(Julian. 167)
Time: 10:45 Mean Canopy Height: 11.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #21 Date: 6/18/82(Julian: 169)
Time: 13:30 Mean Canopy Height: 13.0 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #21 Date: 6/21/82(Julian 172)
Time: 10:25 Mean Canopy Height: 14.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #21 Date: 7/13/82(Julian: 194)
Time: 14:25 Mean Canopy Height: 46.7 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 80.29
Wet Biomass Density: 1.79
Dry Biomass Density: 0.35
Plant Water Density: 1.44

Soybean Field #21 Date: 7/22/82(Julian: 203)
Time: Mean Canopy Height: 66.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 81.20 84.96 80.14 82.53
Wet Biomass Density: 2.42 3.73 2.42 2.86
Dry Biomass Density: 0.45 0.56 0.48 0.50
Plant Water Density: 1.96 3.17 1.94 2.36

Soybean Field #21 Date: 8/4/82(Julian: 216)
Time: 13:42 Mean Canopy Height: 85.2 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 75.32 79.15 77.24 77.52
Wet Biomass Density: 2.30 3.82 4.31 3.48
Dry Biomass Density: 0.57 0.80 0.98 0.78
Plant Water Density: 1.73 3.02 3.33 2.70

Soybean Field #21 Date: 8/6/82(Julian: 218)
Time: 11:30 Mean Canopy Height: 87.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 77.63 80.62 77.65 78.79
Wet Biomass Density: 2.37 3.23 2.76 2.79
Dry Biomass Density: 0.53 0.63 0.62 0.59
Plant Water Density: 1.84 2.60 2.15 2.20

Soybean Field #21 Date: 8/13/82(Julian: 225)
Time: 14:35 Mean Canopy Height: 100.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density:
Plant Water Density:

Soybean Field #21 Date: 8/16/82(Julian: 228)
Time: 16:15 Mean Canopy Height: 99.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 76.53 79.34 78.50 78.46
Wet Biomass Density: 2.48 5.07 6.26 4.60
Dry Biomass Density: 0.58 1.05 1.34 0.99
Plant Water Density: 1.90 4.02 4.91 3.61

Soybean Field #21 Date: 8/21/82(Julian: 233)
Time: 11:20 Mean Canopy Height: 102.8 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 72.65 76.29 75.46 75.24
Wet Biomass Density: 2.65 5.50 4.64 4.26
Dry Biomass Density: 0.72 1.31 1.14 1.06
Plant Water Density: 1.92 4.20 3.50 3.21

Soybean Field #21 Date: 9/10/82(Julian: 253)
Time: 09:50 Mean Canopy Height: 98.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density: 1.82 3.32 3.15 2.77
Dry Biomass Density:
Plant Water Density:

Soybean Field #21 Date: 9/13/82(Julian: 256)
Time: 14:30 Mean Canopy Height: 94.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 60.44 68.56 67.33 66.70
Wet Biomass Density: 1.16 2.88 2.96 2.33
Dry Biomass Density: 0.46 0.91 0.97 0.78
Plant Water Density: 0.70 1.98 1.99 1.56

Soybean Field #21 Date: 9/17/82(Julian: 260)
Time: 14:15 Mean Canopy Height: 95.5 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture:
Wet Biomass Density:
Dry Biomass Density: 0.45 0.85 0.74 0.68
Plant Water Density:

Soybean Field #21 Date: 9/23/82(Julian: 266)
Time: 14:45 Mean Canopy Height: 95.6 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 25.07 21.71 38.98 27.04
Wet Biomass Density: 1.32 2.56 1.36 1.74
Dry Biomass Density: 0.99 2.00 0.83 1.27
Plant Water Density: 0.33 0.56 0.53 0.47

Soybean Field #21 Date: 9/28/82(Julian: 271)
Time: 09:50 Mean Canopy Height: 95.3 cm
Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
% Plant Moisture: 7.93 10.54 15.65 12.02
Wet Biomass Density: 0.97 1.56 1.72 1.42
Dry Biomass Density: 0.89 1.40 1.45 1.25
Plant Water Density: 0.08 0.16 0.27 0.17

Soybean Screen - Soil Moisture Data

Soybean	Field#	21	Date	6/16/82	(Julian: 167)	Time	10:45	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	21.56	21.86	22.20	26.47	23.05	23.02	23.03	1.79 0.78
2-5 cm	21.58	22.87	17.32	25.21	23.16	24.73	22.48	2.85 1.27
0-5 cm	21.57	22.46	19.28	25.71	23.11	24.05	22.70	2.42 1.07
Soybean	Field#	21	Date	6/18/82	(Julian: 169)	Time	13:30	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	17.45	18.51	17.10	18.53	18.58	13.79	17.33	1.84 1.06
2-5 cm	20.19	20.87	20.57	21.80	21.54	21.77	21.12	0.68 0.32
0-5 cm	19.10	19.93	19.18	20.49	20.36	18.58	19.60	1.14 0.62
Soybean	Field#	21	Date	6/21/82	(Julian: 172)	Time	10:25	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	15.89	11.72	16.65	14.44	19.31	10.03	14.67	3.38 2.31
2-5 cm	19.14	19.14	15.62	16.46	22.26	29.37	20.33	5.01 2.46
0-5 cm	17.84	16.17	16.03	15.65	21.08	21.63	18.07	4.36 2.40
Soybean	Field#	21	Date	6/23/82	(Julian: 174)	Time		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	26.54	24.06	25.32	23.96	25.85	31.13	26.14	2.64 1.01
2-5 cm	25.13	24.27	22.96	27.76	25.78	29.19	25.85	2.29 0.89
0-5 cm	25.70	24.19	23.90	26.24	25.81	29.97	25.97	2.43 0.93
Soybean	Field#	21	Date	6/25/82	(Julian: 176)	Time	13:09	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	10.95	4.93	11.02	11.38	11.80	9.53	9.94	2.57 2.59
2-5 cm	17.09	13.16	15.83	15.07	17.65	18.49	16.22	1.94 1.20
0-5 cm	14.64	9.87	13.91	13.59	15.31	14.91	13.70	2.19 1.75
Soybean	Field#	21	Date	6/28/82	(Julian: 179)	Time	14 10	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	15.33	17.20	18.27	19.54	17.13	20.25	17.95	1.79 1.00
2-5 cm	19.37	18.65	19.47	21.17	19.95	21.93	20.09	1.23 0.61
0-5 cm	17.75	18.07	18.99	20.52	18.82	21.26	19.24	1.45 0.77

Soybean	Field#	21	Date	7/ 6/82	(Julian: 187)	Time	10:50	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	3.97	3.14	2.75	3.86	4.27	8.09	4.35	1.92 4.41
2-5 cm	9.24	7.13	4.44	5.64	12.03	11.27	8.29	3.06 3.69
0-5 cm	7.13	5.53	3.77	4.93	8.93	9.99	6.71	2.60 3.98
Soybean	Field#	21	Date	7/ 7/82	(Julian: 188)	Time	14:25	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	2.33	7.28	2.74	3.21	3.87	3.50	3.82	1.78 4.65
2-5 cm	9.01	15.17	8.45	8.85	7.32	8.53	9.56	2.81 2.95
0-5 cm	6.34	12.01	6.16	6.59	5.94	6.52	7.26	2.40 3.63
Soybean	Field#	21	Date	7/12/82	(Julian: 193)	Time		
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	12.85	99.99	13.16	15.70	99.99	15.26	14.24	1.44 1.01
2-5 cm	15.41	16.22	18.20	16.95	19.25	18.58	17.43	1.48 0.85
0-5 cm	14.38	99.99	16.18	16.45	99.99	17.25	16.16	1.47 0.92
Soybean	Field#	21	Date	7/13/82	(Julian: 194)	Time	14:25	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	25.95	21.38	25.30	27.20	24.76	25.31	24.98	1.96 0.78
2-5 cm	22.52	21.93	25.32	26.87	22.39	23.95	23.83	1.94 0.82
0-5 cm	23.89	21.71	25.31	27.00	23.34	24.49	24.29	1.95 0.80
Soybean	Field#	21	Date	7/22/82	(Julian: 203)	Time	09:19	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	13.50	11.39	13.69	17.09	13.05	13.79	13.75	1.86 1.35
2-5 cm	13.88	12.47	13.89	17.05	99.99	15.23	14.50	1.73 1.19
0-5 cm	13.72	12.04	13.81	17.06	99.99	14.65	14.20	1.78 1.25
Soybean	Field#	21	Date	8/ 3/82	(Julian: 215)	Time	13:47	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	2.41	2.93	3.16	2.32	3.19	2.91	2.82	0.37 1.32
2-5 cm	5.31	4.64	5.43	99.99	4.51	4.68	4.92	0.42 0.86
0-5 cm	4.15	3.95	4.52	99.99	3.99	3.97	4.08	0.40 1.04
Soybean	Field#	21	Date	8/ 6/82	(Julian: 218)	Time	11:30	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	23.52	21.00	21.35	22.36	23.01	22.79	22.34	0.98 0.44
2-5 cm	19.10	19.58	20.70	19.56	22.94	21.31	20.53	1.44 0.70
0-5 cm	20.86	20.15	20.96	20.68	22.97	21.90	21.25	1.26 0.60
Soybean	Field#	21	Date	8/21/82	(Julian: 233)	Time	11:20	
Depth	LOC 1	LOC 2	LOC 3	LOC 4	LOC 5	LOC 6	Mean	S.D. S.D./Mean
0-2 cm	14.07	12.43	13.23	14.19	12.31	13.45	13.28	0.79 0.60
2-5 cm	14.62	14.23	14.30	15.26	12.17	13.18	13.96	1.11 0.79
0-5 cm	14.40	13.51	13.87	14.83	12.23	13.29	13.69	0.98 0.71

Alfalfa - Vegetation Data

Alfalfa Field Date: 9/16/82(Julian: 259)
 Time: 15:10 Mean Canopy Height: 29.3 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 83.52
 Wet Biomass Density: 16.35
 Dry Biomass Density: 2.69
 Plant Water Density: 13.65

 Alfalfa Field Date: 10/07/82(Julian: 280)
 Time: 11:40 Mean Canopy Height: 9.8 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 66.22
 Wet Biomass Density: 14.14
 Dry Biomass Density: 4.78
 Plant Water Density: 9.37

Soybean Field# 21 Date: 9/10/82 (Julian: 253) Time: 09:50
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 13.87 9.68 15.24 15.01 11.70 10.07 12.59 2.45 1.95
 2-5 cm 14.32 8.84 15.81 14.35 11.68 12.82 12.97 2.47 1.90
 0-5 cm 14.14 9.18 15.58 14.61 11.69 11.72 12.82 2.46 1.92
 Soybean Field# 21 Date: 9/13/82 (Julian: 256) Time: 14:30
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 14.49 16.65 15.33 17.33 15.72 15.76 15.88 1.00 0.63
 2-5 cm 14.37 13.88 13.88 16.98 14.92 16.10 15.02 1.27 0.85
 0-5 cm 14.41 14.99 14.46 17.12 15.24 15.96 15.37 1.16 0.76
 Soybean Field# 21 Date: 9/17/82 (Julian: 260) Time: 15:15
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 15.88 16.83 17.78 11.74 16.28 18.38 16.15 2.35 1.46
 2-5 cm 15.27 16.33 17.22 14.71 16.68 16.12 16.05 0.92 0.57
 0-5 cm 15.51 16.53 17.44 13.52 16.52 17.02 16.09 1.49 0.93

Soybean Field# 21 Date: 9/23/82 (Julian: 266) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 5.83 99.99 11.32 11.84 9.73 9.38 9.62 2.36 2.45
 2-5 cm 9.44 13.21 13.18 13.57 99.99 13.73 12.63 1.79 1.42
 0-5 cm 8.00 99.99 12.44 12.88 99.99 11.99 11.42 2.02 1.83

Soybean Field# 21 Date: 9/28/82 (Julian: 271) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 7.60 7.71 7.72 6.41 4.12 6.63 6.70 1.39 2.07
 2-5 cm 10.72 13.80 13.39 19.69 16.91 12.92 14.57 3.20 2.20
 0-5 cm 9.47 11.36 11.12 14.38 11.79 10.40 11.42 2.47 2.15

Soybean Field# 21 Date: 9/30/82 (Julian: 273) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 4.47 6.84 4.84 6.92 6.15 7.01 6.04 1.12 1.86
 2-5 cm 9.02 11.36 10.93 12.36 12.23 13.63 11.59 1.57 1.35
 0-5 cm 7.20 9.55 8.49 10.19 9.80 10.98 9.37 1.39 1.55

Alfalfa - Soil Moisture Data

Alfalfa Field# 21 Date: 9/16/82(Julian: 259) Time: 15:10
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 16.65 18.23 20.74 22.18 19.72 18.92 19.41 1.94 1.00
 2-5 cm 18.97 20.55 21.35 21.54 20.44 19.79 20.44 0.96 0.47
 0-5 cm 18.04 19.62 21.11 21.80 20.15 19.45 20.03 1.35 0.68
 Alfalfa Field# 21 Date: 10/7/82(Julian: 280) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 7.20 8.99 7.66 8.08 7.82 6.95 7.78 0.72 0.93
 2-5 cm 12.60 11.95 13.46 12.89 15.10 13.00 13.16 1.07 0.81
 0-5 cm 10.44 10.76 11.14 10.97 12.18 10.58 11.01 0.93 0.86

Weed Defoliation - Vegetation Data

Weed Defoliation (S2) Date: 10/21/82 (Julian: 280)
 Time: 11:40 Mean Canopy Height: 88.8 cm
 Plant Parts: Top1/3 Mid1/3 Low1/3 Whole Plant
 % Plant Moisture: 61.22
 Wet Biomass Density: 0.35
 Dry Biomass Density: 0.14
 Plant Water Density: 0.22

Weed Defoliation - Soil Moisture Data

Weed DEF (Before) Field#:S2 Date:10/21/82(Julian:294) Time:
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D S D./Mean
 0-2 cm 12.45 14.84 15.67 8.62 12.90 3.16 2.45
 2-5 cm 14.96 17.23 16.37 13.65 15.55 1.58 1.01
 0-5 cm 13.96 16.27 16.09 11.64 14.49 2.21 1.59

Bare Soil Moisture Data

Bare Soil Field#:21 Date: 7/15/82(Julian:196) Time: 10:30
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 23.06 20.75 21.75 20.01 16.68 18.81 20.18 2.25 1.11
 2-5 cm 23.17 20.94 21.96 17.30 18.94 20.28 20.43 2.11 1.03
 0-5 cm 23.13 20.86 21.88 18.38 18.03 19.70 20.33 2.16 1.06

Bare Soil Field#:21 Date: 7/23/82(Julian 204) Time: 11 05
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D S.D./Mean
 0-2 cm 6.13 5.22 6.09 6.20 6.29 5.99 0.44 0.73
 2-5 cm 12.95 14.17 15.33 14.48 15.54 13.64 14.35 0.99 0.69
 0-5 cm 10.22 11.28 11.13 11.80 10.70 11.00 0.77 0.70

Bare Soil Field#:21 Date: 7/30/82(Julian.211) Time: 10:40
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 2.60 2.76 2.00 2.91 2.64 2.76 2.61 0.32 1.23
 2-5 cm 5.45 4.01 4.57 7.57 5.17 6.83 5.60 1.35 2.42
 0-5 cm 4.31 3.51 3.54 5.71 4.16 5.20 4.41 0.94 1.94

Bare Soil Field#:21 Date: 8/ 6/82(Julian:218) Time: 10:45
 Depth LOC 1 LOC 2 LOC 3 LOC 4 LOC 5 LOC 6 Mean S.D. S.D./Mean
 0-2 cm 21.78 19.99 21.99 22.42 21.23 26.90 22.39 2.36 1.06
 2-5 cm 21.45 19.89 20.45 21.19 20.06 22.90 20.99 1.12 0.53
 0-5 cm 21.58 19.93 21.07 21.68 20.53 24.50 21.55 1.62 0.74